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SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
Bulletin 101

THE COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS AND SCIENCES

A WASHINGTON SOCIETY OF 1816–1838, WHICH ESTABLISHED A MUSEUM AND BOTANIC GARDEN UNDER GOVERNMENT PATRONAGE

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

BULLETIN OF THE UNITED STATES NATIONAL MUSEUM.
Issued October 18, 1917.

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THE COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS AND SCIENCES.

By Richard Rathbun,
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INTRODUCTION.

In his "Genesis of the United States National Museum,"[1] Dr. George Brown Goode has given a vivid sketch of a very important epoch in the scientific history of this country, showing how a learned society of Washington, at one time possessing 1,600 members, markedly influenced the plan and organization of the Smithsonian Institution, and especially its museum feature. The National Institution, later changed to National Institute, was established on May 15, 1840, by the adoption of a constitution and a declaration of its objects, which were "to promote science and the useful arts, and to establish a national museum of natural history, etc." The founding of this society, as Dr. Goode explains, "was doubtless to a very great degree due to the stimulating and inspiring effects upon public opinion of the Smithsonian bequest." It acquired extensive collections of its own and for a short time also had custody of the Government collections, which were assembled and exhibited in a large hall in the Patent Office building, whence, in 1858 and 1862, they were transferred, in accordance with law, to the Smithsonian Institution.

The plan of the National Institution, says Dr. Goode, "was conceived in a broad and liberal spirit; its membership was a strong one, including at the beginning about ninety representative men of Washington, Members of Congress, scientific men, clergymen and prominent citizens, and as many more corresponding members, among whom were all the leading men of the country. Among its principal officers were the Secretary of War, the Secretary of the Navy, ex-President Adams, the Chief of Engineers of the Army, and other prominent officials. The meetings were well attended, the membership

[1] Annual Report of the United States National Museum for 1891, pp. 273–380, and reprint in the report of the same for 1897, vol. 2, pp. 85–191.

was enthusiastic, gifts of books and specimens began to flow in, and the prospects of the society looked very bright."

In a discourse on the objects and importance of the Institution, delivered January 5, 1841, its president, Mr. Poinsett, said that the Smithson bequest "offered a favorable occasion for carrying into effect all the important objects connected with a national institution, such as that just being organized in Washington, enabling the Government to afford all necessary protection to the promotion of science and the useful arts without the exercise of any doubtful power."

Under certain bills introduced in the Senate a month later, the entire management of the Smithsonian fund was to be intrusted to the National Institution, and provision was made for the establishment of a national museum in terms very similar to those finally incorporated in the fundamental act of the Smithsonian Institution. In the previous five years of discussion relative to the bequest, as stated by Dr. Goode, the idea of a national museum to be administered in connection with the Smithsonian organization had been suggested by no one.

"The influence of this society," as Dr. Goode affirms "was strongly and continuously present in Congress for the six years which followed its organization, until the Smithsonian act was finally framed," and "the master mind which not only prevailed in finally ingrafting the development of the national musem upon the Smithsonian project, but which directly or indirectly led to the formation of the various features of organization which have become such characteristic elements in the Smithsonian plan," was evidently that of Joel R. Poinsett, of South Carolina, who was Secretary of War in the cabinet of President Van Buren. Mr. Poinsett was the senior director of the Institution under the first plan of organization, and its president, under the amended constitution from 1841 to 1845. He had lived an eventful life, his culture was broad and sympathetic, "and he was, perhaps, better fitted than any of the public men of his time to appreciate the necessity of organizing our public institutions on the most liberal and comprehensive plan." Mr. Poinsett refused reelection in 1845, and "from this period the decline of the society's prosperity was marked. It is more probable, however, that Mr. Poinsett's lack of interest was a result of the weakness of the society than that the weakness resulted from his lack of interest."

In April, 1844, a "meeting of the friends of science, including, besides all the members and patrons of the National Institute, the members of the American Philosophical Society and of the Association of American Geologists and Naturalists, had been held in Washington. * * * It was a gala week for the National Institution. The meeting was in every respect a success, and there was every

reason to believe that Congress would share in the general enthusiasm and take the society under its patronage." In a memorial, the indorsement of the museum work of the Institute was very cordial and comprehensive, and very significant. The hopes of the promoters of the Institute were, however, doomed to disappointment, as Congress adjourned without making any provision for its needs. Meetings ceased after the next annual meeting, though an effort was made to revive the organization in 1847, and in 1855 it was brought into existence for a time as a local scientific society.

As Dr. Goode has justly said, "The influence of the National Institute upon the history of science in the United States, and particularly in educating public opinion and the judgment of Congress to an application of the proper means of disposing of the Smithson legacy, can not well be overestimated. If the Smithsonian had been organized before the National Institute had exerted its influence, it would have been a school, an observatory, or an agricultural experiment station. In 1846, however, the country was prepared to expect it to be a general agency for the advancement of scientific interests of all kinds—as catholic, as unselfish, as universal as the National Institute."

In his paper, Dr. Goode also refers to an earlier Washington society than the National Institute, but as he had only a copy of the first presidential address, some of the treasurer's statements and a few isolated memoranda, he could give but a brief and incomplete account of its objects, and had practically no information regarding its history and achievements. He concluded that the minutes and other records of the society had been lost or destroyed, but, in fact, the minutes and some additional papers are preserved in the Library of Congress, and still other papers are in the possession of the Smithsonian Institution. It is unfortunate that Dr. Goode did not have access to these records which would have enabled him to complete the early history of the movements for the advancement of science and art and the establishment of a museum in the National Capital, and would, undoubtedly, have led him to modify some of the conclusions expressed in his "Genesis." The two societies were engaged in a common cause, the dissolution of the first preceded by only three years the organization of the second, and a part of the membership passed from one to the other. The earlier society formed a museum equally designed to be national, and still partly in existence. Both societies found themselves dependent for their funds upon the dues of members, though the former sought larger means from Congress, through direct appropriation, the holding of a lottery or the sale of public lots, while the National Institute was organized in the full expectation of controlling and having use of the Smithson bequest.

The Columbian Institute for the Promotion of Arts and Sciences was the first learned society established in Washington, its organiza-

tion dating from June, 1816, sixteen years after the occupation of the city as the Federal Capital, and less than two years after its invasion by the British troops. The population was little more than 10,000, and the repair and reconstruction of the public buildings was still in the initial stage. The time and circumstances would scarcely appear to have been propitious for starting such an association, but prosperity was rapidly returning to the city, and the materials for leadership and an active membership were available—residents in business or professional occupations, civilian and military officers and other employees of the Government, and Members of Congress.

Bryan,[1] speaking of the conditions at this period, notes the increase, in the principal centers in 1818, of new structures, used wholly or in part for the retail trade, the number of persons brought to Washington to attend to their interests before Congress and the Executive Departments, and the attractions of the National Capital as a place of residence to persons of means, a phase of the situation commonly believed to have developed only in comparatively recent years, Mayor Blake, two years after the war, giving as one of the causes of the increase in the population of the city, "the acquisition of many wealthy citizens."

The lower section of Pennsylvania Avenue, however, had a desolate appearance, being without houses or brick sidewalks. The land between Sixth Street and the Capitol on the south side and between John Marshall Place and Second Street on the north side, belonging to the Government, was entirely neglected. Some improvements in this neighborhood were brought about through the agency of a board of commissioners appointed in 1822 by the city council, including the partial reclamation of the low lands south of the avenue, in which a site for the botanic garden of the Columbian Institute had just before been located.

The objects of the Institute, which was chartered by Congress in 1818 for a term of twenty years, were as a whole very diversified, those specifically named in the beginning having been almost wholly of a utilitarian nature, such as the Government has from time to time assumed and made the basis of the work of several scientific bureaus, established for research, experiments and the application of the knowledge so gained to useful purposes. Four years later, however, an organization was adopted which gave to the Institute the latitude

[1] For much of his information regarding affairs generally in Washington at the beginning of the last century, the writer desires to express his indebtedness to the admirable and painstaking work by Wilhelmus Bogart Bryan, entitled "A History of the National Capital from its foundation through the period of the adoption of the organic act," published in two volumes by The Macmillan Company, New York, in 1914 and 1916, respectively.

of a comprehensive learned society. Among all the activities planned only a few were in any way conspicuously carried out, in default of the necessary support, the most important and material of these being the establishment of a botanic garden and a museum, both regarded essentially as parts of the equipment required for achieving certain of the purposes of the society, but nevertheless designed to have a national and permanent status. The former occupied the extreme eastern end of the Mall which then approached much nearer to the Capitol than at present, and included the site of the present United States Botanic Garden. Through the cultivation of the garden it was expected to obtain many useful seeds and plants for distributing throughout the country, but while this hope was never realized, extensive distributions of foreign seeds and grains, obtained through Government sources, and subject to the requests of Members of Congress, were conducted for several years, presumably inaugurating the system subsequently followed by the Department of Agriculture.

Starting with a cabinet of minerals which remained predominant in this connection, this feature soon developed into a general though small museum, containing specimens of zoology, botany, ethnology, archeology, fossils, etc. Transferred to the National Institution in 1841, some of the objects are now readily distinguishable in the United States National Museum, forming, it may be claimed, the nucleus of its collections.

The advice of the Institute was sought and obtained in the matter of formulating instructions for the scientific work of the United States Exploring Expedition, 1838–1842; its aid was asked in the preparation of a National Pharmacopœia; and it became closely associated, mainly through two of its prominent members, William Lambert and William Elliot, with the problems of determining the meridian of Washington, of establishing a national astronomical observatory, and of fixing upon a system of weights and measures.

The Institute obtained its meeting places and accommodations for its museum mainly through the favor successively of the executive departments, the municipal government and Congress. It was first located in Blodget's Hotel, containing the General Post Office and the Patent Office, followed by the Treasury Department and City Hall, being finally assigned a permanent home, in 1824, in the western addition to the Capitol building, which had just been completed. The use of the site for its botanic garden was also a grant from Congress.

The meetings were not generally interesting, being mainly devoted to business matters. There were only two regular meetings annually during the first four years, after which the number was increased to 12, though not always held because of the lack of a quorum.

Beginning in 1825, weekly sittings were arranged during the sessions of Congress for the reading of scientific and literary productions, but this was continued for only a short period. During the last few years the number rapidly declined. There was only one in 1837, the minutes of which indicate no unusual action, but it proved to be the last, and the Institute virtually dissolved without formality the year before the termination of its charter.

The records show only 85 communications by 26 persons presented during the entire life of the society, over one-half of which related to astronomy and mathematics. Besides other technical papers of more or less interest, and some of a popular character, there were also six largely attended public meetings devoted to anniversary addresses and memorials. The lack of funds prevented the publication of transactions, as had been contemplated, which would have gone far toward perpetuating the name of the society, the only matters printed being the public addresses, a paper on currency by Thomas Law, the proceedings for organization, the constitution and constitutional ordinance, standing rules, and a circular on collecting and preserving specimens.

While perhaps about 150 persons qualified for resident or active membership, though the records are not clear on this point, not over one-half that number were ever in good standing at any time, the proportion being generally smaller and the total number becoming greatly reduced during the final years. The number elected to corresponding membership was 122, and to honorary membership, 7. The resident membership was representative of the best element in Washington, while the corresponding and honorary memberships included some of the best known men in science, literature and the arts both in this country and abroad. The brunt of the society's work had naturally to be borne by the resident members, among whom there were very few who specialized in either science or the arts. As stated by Secretary Dickins, it was an organization of gentlemen, who were for the most part occupied in laborious official or professional duties. While, therefore, the local membership engaged with much zeal, during the first 10 or 12 years, in promoting the interests of the Institute, it consisted mainly of amateurs in respect to the subjects with which the society was concerned. With the necessary funds, experts could have been employed, but lacking these means, the records show scarcely any accomplishments in the direction of the higher purposes for which the society was founded.

However unfortunate in the realization of its ambitions, the Columbian Institute nevertheless occupied an enviable position among the earlier associations of this country for the breadth and importance of its objects, even if they be regarded only in the nature of suggestions, which have since been so fully recognized in the or-

ganization of the Government and elsewhere, and for its hearty and unselfish efforts to carry them out. Though no longer organized at that time, an invitation for its members to join the National Institution and to transfer its museum and other property was received and accepted in 1841.

Like the National Institution, the Columbian Institute owed its establishment and early successes to a masterful mind, the author of its plans, who gave the best of his efforts to impress the importance of its objects and the advantages to be gained from such an organization. It is to Dr. Edward Cutbush, then a surgeon in the Navy, and the first president of the society, that these remarks apply, though acknowledgments are also due to Thomas Law for the suggestion of such a society at the seat of government. As with Poinsett, Dr. Cutbush finally reached a state of discouragement, but, though leaving Washington in 1826, he never lost sight of the promise of the work he had started.[1]

Recurring again to Dr. Goode's "Genesis of the United States National Museum," the following extract, relating to a letter from Dr. Cutbush, dated Geneva, N. Y., January 20, 1842, accepting election to

[1] Dr. Goode, in "The Genesis of the United States National Museum," has given interesting biographical sketches of these two notable men, from which the following is abstracted.

Edward Cutbush and his brother James, natives of Pennsylvania, were among the most active of the popular teachers and promoters of science and education at the beginning of the last century. Both were physicians, both teachers of chemistry, both enthusiastic in the work of founding schools and learned societies. Edward graduated from the medical department of the University of Pennsylvania in 1794, and became attached to the militia of Pennsylvania, first as hospital surgeon and subsequently as surgeon-general. On June 24, 1799, he was appointed a surgeon in the United States Navy, in which capacity he served until June 20, 1829, when he resigned. He was stationed in Washington at the time of the founding of the Columbian Institute in 1816, and apparently until 1826. Later he became a resident of Geneva, N. Y., and participated in the establishment of the medical institute of Geneva College, which was formally opened in 1835 and in which he became professor of chemistry. In 1842 he appears to have been still living in Geneva at an advanced age.

Thomas Law was a member of an English family of talent and influence. He was born in England in 1756, and at the age of seventeen entered the service of the British East India Company in Bengal. He was rapidly promoted, occupied high positions, and was the author of important reform measures, until 1791, when failing health caused him to return to England. In 1793 he removed to America and settled in Washington where he invested all his property in houses and lots, and for forty years was one of its most zealous and enlightened citizens. He was also one of the leaders in the intellectual life of the infant Capital, and notwithstanding pronounced personal eccentricities was universally respected. He married, as his second wife, Miss Eliza Parke Custis, granddaughter of Martha Washington. His death occurred in 1834.

corresponding membership in the National Institute, will be found interesting in this connection:

"After thanking the Institution 'for this memento of their friendship and recognition of past services in the cause which has been so honorably revived at the seat of Government,' he continues thus: 'I most sincerely hope that all the objects which engaged the attention of Thomas Law, Esq., and myself, in 1816, in establishing the Columbian Institute will now meet the approbation and support of the Government, and of the scientific men of the District of Columbia.'"

Dr. Goode then concludes:

"Cutbush's address before the Columbian Institute nearly three-quarters of a century ago is well worthy of study at the present time. It is full of enlightened patriotism and of hopeful prophecy for the United States and for Washington. 'Where genius and talent are respected, rewarded and promoted,' he wrote, 'the arts and sciences will flourish and the wealth and power of the nation increase.'

"The wisdom of such men as Cutbush opened the way for the organization of the National Institution, which in its turn, as we shall see, had an important influence toward shaping the course of the Smithsonian Institution.

"Indeed, the germ of the Smithsonian idea may be found in Cutbush's address—and his spirit was kindred to that of Henry and his associates, who worked under more favorable conditions thirty years later."

During the period of the Columbian Institute, several other associations of a more specialized character were formed, and, while few survived more than a limited time, two are still in existence. Belonging to an earlier date and not a Washington institution, was the United States Military Philosophical Society, formed at West Point, N. Y., in 1802, for the promotion of military science, which held one of its meetings in Washington in 1808. Although lasting only about 10 years, it had at one time at least 215 members, chiefly Army and Navy officers, with a large representation of the leading civilians of the country. The only District association which preceded the founding of the Institute was evidently the Columbian Agricultural Society, organized in 1810 for the encouragement of agriculture and domestic manufactures. There are notices of interesting spring and fall exhibitions in 1810, 1811 and 1812, but, together with its newspaper organ, the *Agricultural Museum*, it apparently ended with the coming of the war. It is said to have had as many as two hundred members, each paying $10 a year, and premiums were given for articles manufactured in the District of Columbia and adjoining States. Among articles of this class noticed at one of the exhibitions were fabrics of cotton, hemp, linen, etc., such as fancy patterns for vests,

cotton cloth for pantaloons or small clothes, counterpanes, stockings, sheeting, shirts, etc.

The Medical Society of the District of Columbia and the Washington Botanical Society were both established in 1817; and the Columbian Horticultural Society for the encouragement, promotion and improvement of horticulture in all its branches, and the Washington Monument Society, in 1833. Each of these included prominent members of the Columbian Institute, and both the Medical and Monument societies are among the influential Washington associations of today. Next and last came the Historical Society of Washington, founded in 1836, which, with the Columbian Institute, became merged in the National Institution in 1841.

Georgetown College, which originated in 1789, had already attained some prominence, and at least early in the thirties was said to have possessed a small but interesting library and a cabinet of minerals and other objects of natural history. George Washington University, then known as Columbian College, was opened in 1822, and within a few years comprised, besides the collegiate department, departments of theology, medicine and law, and a preparatory school. Its faculty included several members of the Columbian Institute.

The assembling of natural history specimens and of objects of art had been begun by others even before the organization of the Columbian Institute, and by the time of its dissolution some of the collections outside of the Institute had attained much prominence and value. C. Boyle, an artist from Baltimore, is said to have established the first museum of natural history in Washington, in the studio previously occupied by Gilbert Stuart, at least as early as 1810; and soon afterwards Mr. Villard, superintendent of the military depot at Greenleaf's Point, was reported to have made a small collection of objects of the same character.

In the building of the Patent Office, occupied from 1812 until 1836, when it was burned, was gathered a collection of models, sometimes called by courtesy the American Museum of Art. In the more substantial building afterward erected for the same office, the number of models of inventions reached an exceptionally large figure, and there was also a very extensive collection of natural history, of art and of articles of historical interest, a selection of the former and all of the latter passing finally to the custody of the Smithsonian Institution. Georgetown College, as already mentioned, had a cabinet of natural history, while the Department of War was accumulating through its surveys and otherwise important collections in geology, paleontology and ethnology, including the remarkable series of paintings of Indians and Indian scenes, which were later to become much better known.

Stone carvings for the Capitol building were among the first objects of art executed for a public structure in Washington, and it is interesting to note the appointment of a federal art commission in 1825, during the presidency of John Quincy Adams and at his instance, to determine which of the models and designs submitted for the tympanum of the central east entrance of the Capitol building possessed the most merit. This commission consisted of William Thornton and C. B. King, selected by the President, and Col. George Bomford, U. S. Army, named by Mr. Bulfinch, architect of the Capitol. That the competition was seriously judged is evidenced by the fact that none of the models presented was deemed entitled to the award, and another design was specially prepared following a suggestion by the President.

Only a single monument was extant at that time, a memorial erected at the Navy Yard in 1808 to the "heroes that fell before Tripoli in 1804," the cost of which was wholly defrayed by private subscription among officers of the Navy. The four paintings by Col. John Trumbull, commemorative of events in the American Revolution, authorized by Congress and installed in the rotunda in 1824, were the first decorations of this kind produced for the Capitol. They were renovated in 1828 in the room of the Columbian Institute, where Vanderlyn also evidently executed his rotunda painting.

FOUNDING AND OBJECTS.

The Columbian Institute had its origin in the formation, on June 15, 1816, of an association termed the Metropolitan Society, with the following plan, signed by 89 residents of the city of Washington:

A few of the citizens of Washington, impressed with the importance of collecting and distributing the various vegetable productions of this and other countries, have determined to form themselves into a society under the name of the "Metropolitan Society," and to connect with it a cabinet of the minerals of the United States and other parts of the world.

To aid them in this important undertaking, they propose to solicit from the several members of Congress who annually visit the Metropolis, and from those citizens of our country who devote themselves to such subjects as the society will embrace, specimens of grains, grasses, fruits, dye-stuffs, medicinal plants, minerals, &c., in short every thing that will be beneficial to the public, whether indigenous or cultivated, within their respective districts.

Under these impressions, they will be gratified if you will promote the undertaking by becoming a member; the expenses not to exceed five dollars per annum.

They have it in contemplation to apply to Congress for the appropriation of about 200 acres of ground, called "the Mall," which was designed in the original plan of the city for a public garden. In this place it is proposed to cultivate the plants and seeds which may be presented to them; and as they multiply, to distribute them throughout this extensive continent. They trust that the beneficial objects which they wish to promote will plead their excuse for the

commencement of an establishment, which, they flatter themselves, will hereafter expand and flourish; good intentions and zeal are all they pretend to; and they rely on the cooperation of scientific members to aid them in the important undertaking.

At a meeting of the subscribers to this society on June 28, following, a committee, composed of Samuel Harrison Smith, Rev. Dr. Andrew Hunter, John Law, Dr. Alexander McWilliams and Dr. Edward Cutbush, was appointed to frame a constitution, the draft of which was submitted and unanimously agreed to on August 8.[1] The name was changed to "Columbian Institute for the Promotion of Arts and Sciences," and the objects were defined as follows:

Art. 2. The objects of the Institute shall be to collect, cultivate and distribute the various vegetable productions of this and other countries, whether medicinal, esculent or for the promotion of arts and manufactures.

Art. 3. To collect and examine the various mineral productions and natural curiosities of the United States, and give publicity to every discovery which they may have been enabled to make.

Art. 4. To obtain information respecting the mineral waters of the United States, their locality, analysis and utility; together with such topographical remarks as may aid valetudinarians.

Art. 5. To invite communications on agricultural subjects, on the management of stock, their diseases and the remedies.

Art. 6. To form a topographical and statistical history of the different districts of the United States, noticing particularly the number and extent of streams, how far navigable; agricultural products, the imports and exports; the value of lands; the climate, the state of the thermometer and barometer; the diseases which prevail during the different seasons; the state of the arts and manufactures; and any other information which may be deemed of general utility.

Art. 7. To publish annually, or whenever the Institute shall have become possessed of a sufficient stock of important information, such communications as may be of public utility; and to give the earliest information, in the public papers, of all discoveries that may have been made by or communicated to the Institute.

Some twenty months later, or on April 20, 1818, a charter[1] was received from Congress, in which the only reference to the purposes of the Institute was contained in section 4, namely:

That the said corporation may procure, by purchase or otherwise, a suitable building for the sittings of the said institution, and for the preservation and safe-keeping of a library and museum; and, also, a tract or parcel of land, for a botanic garden, not exceeding five acres: *Provided*, That the amount of real and personal property to be held by the said corporation shall not exceed one hundred thousand dollars.

On October 4, 1819, the general committee of the Institute reported,

that since the last annual meeting of the Institute the secretary of the committee has frequently advertised for monthly meetings of the committee; and

[1] Printed in full in the appendix.

it is a subject of regret that although so few members are necessary to form a quorum, there has very seldom been a regular monthly meeting. Whenever there has been such meeting the propositions have been few; and all those adopted appear on the minutes of the committee, which are part of the records of the Institute. The committee have only to report, what must be a subject of concern to every zealous member of the Institute, that no probability appears of any efficient measures being adopted to further the objects of the Institute while such apathy exists among the individual members; and unless some remedy be devised, by an alteration of the constitution, or some radical reform of the existing regulations of the Institute.

With a view to correct these conditions a "Constitutional ordinance for the government of the Columbian Institute,"[1] designed to create a more specific interest among the members in the work of the society and apparently, though without definition, enlarging its scope, was passed on the 11th of October, 1820. The provisions directly relating to this subject were contained in three paragraphs, as follows:

The Institute shall consist of five classes, viz: of mathematical sciences, physical sciences, moral and political sciences, general literature and the fine arts.

The members composing each class shall, specially, charge themselves with the investigation of the objects embraced therein, and communicate to the Institute, from time to time, the results of their inquiries; but every member of the Institute shall have the right of making such communications as he may deem proper, on any object of art or science.

Resident members shall, as soon as may be after their admission, indicate the class to which they wish to belong. The like indication shall be made by those who are now members on or before the first Saturday in 1821.

On May 8, 1820, the use of five acres of land was granted by Congress for a botanical garden, and four years later, on May 26, 1824, the area of this grant was extended.

To Dr. Cutbush, the first president of the Institute, we are indebted for the only comprehensive explanation of the objects of the society as announced in the constitution (of which he is said to have been the author), and of the advantages which the community may derive therefrom, embodied in an eloquent discourse delivered in Congress Hall before a large audience on the evening of January 11, 1817. His remarks were in part as follows:

Thus, gentlemen, you are presented with an ample field for the exercise of your talents and industry; difficulties, I am sensible, will occur, but were there no difficulties to encounter, less would be the space for the expansion of your genius. It is true, that in the infantile state of our city, we cannot boast of the possession of many, whose avocations have permitted them to devote their time to the cultivation of the sciences; but we can, with confidence, assert, that there are many, very many, who possess industry and an ardent desire to promote the objects of the Institute; whose minds, when allured to the contemplation of those objects, aided by a botanical garden, a mineralogical cabinet, a

[1] Printed in full in the appendix.

museum for the reception of natural curiosities, and a well selected library, will, in a short period, be enabled to render essential services in many of the branches of knowledge embraced by our constitution. In the meantime, I trust, that the members who have been selected to execute the important duties required of the general committee, will, by their talents, industry, and perseverance, render the establishment worthy of the District of Columbia; and, by their example, will stimulate others to devote their time and talents to the promotion of the laudable undertaking; thus, by an accession of talent, "growing with its growth, and strengthening with its strength," we may look forward, with pleasure, to the period, when the Columbian Institute, for the promotion of arts and sciences, will assume an elevated rank amongst the scientific associations of our country. * * *

In our Institute, as in a pure and fertile climate, talents of different kinds may spring up and unfold themselves, which, if properly applied, may cause the liberal arts and sciences to flourish; and how pleasing is the reflection, that many, probably, whom I have now the honor to address, may be instrumental in giving a proper direction to the labors of the agriculturist, the artist, and the manufacturer; pardon me, if I presume to extend the importance of this Institute still further, even, if properly conducted, to the advancement of the literary character of our country. * * *

The extensive limits of our country afford numerous opportunities for discoveries and improvements, in every branch of natural science. How many plants are there, natives of our soil, possessed of peculiar virtues, which would supersede the necessity of importing those that are medicinal, or necessary for the operation of the dyer! How many minerals which might serve, not only to enrich the cabinets of the curious, but minister to the wants of our growing population! What an infinite number of substances may present themselves as objects of new trade and commerce, or for the supply of the necessary materials for the various domestic arts and manufactures; and what means are so likely to bring them to our knowledge, as research and careful investigations? Therefore, considering the extent of territory embraced by the United States, whose surface and internal structure have scarcely been examined, it must be regarded as a national reproach, that we are still unacquainted with the important sources of wealth, which are yet to be opened by chemical and mineralogical enterprise. Every individual of our republic should be animated with a patriotic zeal in this important undertaking.

We have been peculiarly fortunate, my friends, that our association has commenced at the seat of Government; where, through the representatives of the people, coming from the various sections of our country, of different climates and soils, whose minds are illuminated by the rays of science; and through the scientific citizens and foreigners who visit this metropolis, we may reasonably expect, not only valuable communications, but various seeds and plants; hence, the necessity for a botanical garden, where they may be cultivated, and, as they multiply, distributed to other parts of the Union. Arrangements should likewise be made to establish a museum, in which the natural curiosities may be deposited, and the minerals, which may have been presented, scientifically arranged, noticing particularly their locality; and the public should receive the earliest information on such as may appear of utility in the various arts and manufactures. The numerous grasses, grains, medicinal plants, trees, &c., which are not indigenous to our country, should be carefully collected, cultivated, and distributed to the agriculturists.

Here followed extended remarks on the introduction into, or the cultivation in, this country of the coffee plant, sugar, cotton, various

dyeing drugs, the cochineal insect, the silkworm, the vine. the common sunflower, the white poppy, and plants capable of manufacture, closing with the statement, "Should we be enabled to introduce a single grain, or one grass, which will afford a greater proportion of nutriment than those we now possess, millions may be produced to our country."

Again, in connection with botany, Dr. Cutbush explained:

By establishing a botanical garden, we may not only receive instruction ourselves, but excite a spirit of enquiry in the minds of the rising generation; every parent within the District of Columbia, who is desirous of seeing his children possessed of general information, should contribute toward the establishment and support of the garden, museum, and library. * * *

To Dr. Benjamin Smith Barton, deceased, late professor of botany and natural history in the University of Pennsylvania, our country is highly indebted for that spirit of enquiry, which has been excited throughout the United States, on this important branch of science, by which many valuable indigenous plants have been added to the materia medica; and, I trust that the time is not far distant, when we shall be enabled, with certainty, to say, "*ubi morbus est, ibi remedium.*" In short, my friends, there is scarcely an art, science, or manufacture, which may not be benefited by this association; and should we be so fortunate as to succeed in establishing a botanical garden, it may excite an emulation among the proprietors of the eminences around our city, by inducing them to cultivate and adorn those beautiful heights with gardens; no city in the United States presents a greater assemblage of sublime views; nothing is wanting but industry, public spirit, and population, to render them not only pleasing to the eye, but highly advantageous to this district.

Passing from agriculture, horticulture and architecture to the subject of mineralogy, he remarked:

Our country, as I have already stated, so far as it respects her minerals, is unexplored. Of the immense riches which her bosom contains, we are absolutely ignorant; it should, therefore, be one of the primary objects of the Institute, to procure specimens of all the minerals which have been, or may hereafter be, found in the various districts. Independently of the metals, clays, marbles, &c., which may be found useful to the artists and manufacturers, pigments might be manufactured from many of the ores, equal, if not superior, to those which are imported. Within forty miles of this city, a mineral [chromate of iron] is found, which furnishes a pigment that has been sold in Europe at a guinea per ounce. In consequence of this defect of knowledge respecting the minerals of our country, persons have been sent from the borders of Seneca Lake, in the state of New York, and, if I mistake not, from Pittsburg, in the state of Pennsylvania, to a spot in the vicinity of Philadelphia, to procure clay, from whence it was transported, by land and water, from three hundred and twenty to six hundred miles, for the use of their respective glass manufactories, when, doubtless, the same quality of clay could have been found in their vicinity, if the country had been explored.

The mineral, or subterraneous treasures of our country are, next to agriculture, interesting subjects of enquiry; in many places, the riches of the surface are nothing, when compared with those which are concealed in her bosom. What an important discovery would a bed of coal be in the vicinity of our large cities, where fuel is daily becoming a scarce and extravagant article? And how immensely valuable would sulphate of lime and marl be to planters in the

vicinity of this place? In fact, agriculture and commerce depend, in a great measure, on mineral treasures. Many persons, who have not had an opportunity of consulting works on mineralogy, conceive that minerals, properly so called, are ores, or metallic substances; but all the solid substances of which our globe is composed, are called minerals, and that branch of science which describes and investigates their properties, mineralogy; which is usually divided into stones, salts, combustibles, and ores; these again are subdivided into orders and families. It will be highly useful to have a cabinet of such minerals as have been, or may be, found in our country, properly classed, and, if the funds of the Institute should hereafter permit it, a complete collection of foreign minerals, scientifically arranged for comparison.

Another object, which claims the attention of the Institute, is, to obtain correct information respecting the mineral waters of our country. * * *

The communications which may be received on agricultural subjects, on the management of stock, their diseases and the remedies, when promulgated by the Institute, will afford valuable information to the practical farmer.

The sixth article of the first section of our constitution, which embraces topographical and statistical information, contains so many questions, highly interesting to the community, that volumes might be written on their importance. On these, as on many other branches of knowledge embraced by the Institute, we may expect many learned communications from the enlightened representatives of the people, who annually visit this city.

Finally, the selection and publication of the most valuable papers, which may have been communicated, whether on commerce, agriculture, the arts, sciences, or manufactures, will, I trust, furnish annually a respectable volume of information.

Recommending the printing of circulars, "containing the necessary questions for the information of the Institute, so arranged and divested of technical terms that those persons who have not been engaged in scientific pursuits may be enabled to comprehend and answer them with promptness," and suggesting "the propriety of offering premiums or some honorary reward, whenever the funds will permit, for important discoveries in agriculture, or the mechanic arts or sciences which may promote it," the speaker turned to the subject of the science of chemistry which "may be considered a handmaid to many of the arts embraced in the objects of the Institute."

In connection with the operations of nature and existence of man, this science is worthy of a more general diffusion; it unfolds the most important phenomena of nature, and teaches us to render the productions of the animal, vegetable, and mineral kingdoms subservient to our use, and enables us to reason on the properties of bodies which most immediately concern us, and to predict their alterations; it presents to us a sublime view of the order and harmony of the different parts of our system, and displays, in a superlative degree, the wisdom and goodness of our Creator. * * *

Dr. Bancroft, in his philosophy of permanent colors, observes, that Mr. Wedgwood, whose ware has been so much admired in this country, in consequence of his application to chemistry, was enabled to procure all the fine diversity of colors, which decorated his pottery, from the oxides of iron. Bleaching, tanning, glass, and porcelain making, the working of metals, and various other arts, are purely chemical; therefore, in proportion as chemistry is cultivated, in the same ratio will the arts flourish. Agriculture can only be improved by

the assistance of the chemical philosopher. It is chemistry which explains the phenomena of vegetation, the growth, the maturation, and the death of plants; and to chemistry we must have recourse to remedy the diseases to which they are subject. * * *

On taking a retrospect of the importance of this association, I cannot refrain from indulging the pleasing hope, that the members of our national government, to whom has been confided the guardianship of the District of Columbia, will extend their fostering care to this establishment, and, if no constitutional restrictions forbid it, that a part of the public ground, reserved for national purposes, may be vested in the Columbian Institute for the promotion of arts and sciences, for the purpose of carrying into effect the leading objects of the association; * * * I would also, with due deference, suggest, that a small pecuniary aid would enable the Institute, at an earlier period, to extend its benefits to all parts of the United States. * * *

In no nation has their [our countrymen's] industry been surpassed; the earth, cultivated by their care, teems yearly with new productions; the proud oak falls at their feet to receive from them a new being; hemp and flax are divested of their bark to furnish clothing; the metals are moulded by their hands; the fleece intended for their use is woven and dyed of various colours; and the golden harvest and rich attire of their verdant lawns, attest their industry, their opulence, and increasing importance.

The confines of the patent office, of our city, bear ample testimony of the genius which prevails in all parts of our country. To what are we to attribute this grand spectacle, or what has infused so much strength and activity into the mind, but our republican institutions? We have the superlative happiness to live in tranquillity, under an inestimable form of government; here, plenty smiles, and an honorable field is open to the talents and enterprise of every class of citizens. Where genius and talents are respected, rewarded and promoted, the arts and sciences will flourish, and the wealth and power of the nation increase.

A few other expressions of the time, all of them brief but adding something to the remarks of Dr. Cutbush, are important to cite in this connection. Asbury Dickins, secretary of the society, in a letter to Dr. William Darlington on December 16, 1819, said, among other things, that

The subject to which your letter relates [a herbarium] is one that the Institute has very much at heart; and the collection which you propose, as well as an extensive botanic garden, are among the establishments which enter into its plans. * * * Our desire is to make the Institute a national body. Its plans, therefore, though too extensive for our own present scientific or pecuniary means, by embracing every department of human knowledge will afford scope for the formation of a fabric which the genius of our countrymen will find a pleasant and honorable task to rear, and which will be worthy of the high destinies of the American nation.

W. B. Bryan in his recently published "A History of the National Capital," (vol. 2, p. 30) quoting in part from the *National Intelligencer* for January 1, 1820, states,

The thought of the founders as to its scope may be inferred from a contemporary account of the purposes of the Institute, which were not alone to establish a botanic garden, but "when its funds will authorize the important undertaking, the erection of a building for a national museum and library."

The following is from the *Washington Guide* of William Elliot for 1826:

> From the liberal plan of the Institute, from its position at the seat of Government, where many of the best informed men are annually collected from all parts of this extended republic, and from the zealous interest which is manifested in its prosperity by the most distinguished individuals in the nation, the Institute must, in time, be of great utility and acquire a high reputation.

S. L. Knapp (Ignatius Loyola Robertson), author and member of the Institute, wrote in 1830 that,

> It was founded upon a noble basis, to promote learning in all the various branches of arts, sciences and letters. * * * After the bustle of politics is over, it is to be hoped that the watchful eye of the scientific and literary part of Congress will see the wants of the society, and that the liberal part will be disposed to aid in giving it something annually to carry on their useful labors. The members are most certainly laboring for the good of the community at large, not for themselves, and, therefore, deserve encouragement. It has sufficient talent among its members to do honor to the reputation of the country in the literary and scientific world.

To briefly summarize the objects of the Institute, we find that its aims as expressed in the plan of the Metropolitan Society and the constitution of 1816 were almost wholly utilitarian, and not the advancement of knowledge for its own sake. The collection, cultivation and distribution of plants were proposed in the interest of medicine, foods and the arts and industries, and as it was the living plant that was sought, their care and growth required a botanic garden, which was early acquired. Failure to make provision in the beginning for an herbarium of dried plants may readily be accepted as the reason for the organization in 1817 of the Washington Botanical Society, an account of which is given elsewhere, but ultimately such an herbarium became a feature of the museum of the Institute.

The collection and examination of mineral productions, which would naturally lead to the formation of a cabinet of such material, were also, according to the explanatory address of Dr. Cutbush, to be made with special reference to their industrial application.

As to mineral waters, the intention seems to have been simply to collect data regarding the mineral constituents, utility and location of the various kinds, information mainly desirable in connection with medicine, as was also the record of diseases which prevail during the different seasons.

On agricultural subjects, on the management of stock, their diseases and the remedies, communications were to be invited. In the sixth article are enumerated several important subjects without explanation of how information regarding them was expected to be obtained, namely, topography and statistics, the navigation of streams, commerce, climatic conditions, land values, the state of the

arts and manufactures, and closing with the general clause "any other information which may be deemed of general utility."

In the extensive and diversified task which the Institute had thus set for itself, one may almost feel certain of the responsibility of Thomas Law for most of the ideas that were incorporated in this section of the constitution, as they follow the thought so constantly expressed in his innumerable and valuable communications, mainly devoted to schemes for benefiting mankind. The first expressed objects of the Institute as a whole were, in fact, such as required the resources of the Nation or of the several States for their consummation, and anticipated the work which has since and only too slowly forced its attention on legislators. These objects received recognition from Congress by an act of incorporation, and, in addition, to the extent of granting the use of land for a botanic garden and of a room for the collections, but no funds were ever appropriated for helping out any of the praiseworthy measures proposed by the Institute.

The constitutional ordinance of 1820, without abrogating any of the original objects, divided the Institute into five classes, the mathematical, physical, and moral and political sciences, general literature and the fine arts. The principal idea in this action, with the requirement that every member should affiliate himself with one or other of the classes, was to give each member something definite to do, and thereby increase his interest in the society and induce his more frequent attendance at meetings. The organization thus effected was also more indicative of the purposes of a learned society, and might also be expected to attract a larger membership, considering the character of material to be drawn upon in Washington at that time, men more or less liberally educated, but few who would give their time to the promotion of economic or utilitarian subjects. Even so, while the attendance proved greater at times, and the number of communications increased, the society did not prosper as was expected, and its prolongation was maintained with difficulty.

MEMBERSHIP.

Under the constitution of 1816 only two classes of members, resident and honorary, were recognized, but by the constitutional ordinance of 1820 corresponding membership was added. In the former it was also provided that "the President of the United States for the time being shall, with his permission, be considered the patron of the Columbian Institute." James Monroe, who was then the chief executive, appears, however, to have been the only one who was tendered and accepted this position. His successors in that office during the remaining period of the Institute, John Quincy Adams

and Andrew Jackson, were both resident members. The honorary list apparently never exceeded seven persons, including the three living former Presidents, John Adams, Thomas Jefferson and James Madison; the Marquis Lafayette and Baron Cuvier.

Even at that early period Washington counted among the local population a large number of professional and business men of cultivation and attainments; while its status as the federal capital brought into more or less permanent residence many men of learning, ability and distinction from all parts of the country. These belonged mainly to the civilian and military branches of the Government, and to both houses of the national legislature. It was from these sources that the resident membership of the Institute was chiefly obtained, though Congress was as strongly represented in the roll of corresponding members, and changes in the status of Senators and Representatives from one class to the other were occasionally made.

There was then almost wholly lacking in Washington, however, that representation by professional experts of the objects planned by the society, such as only some years later began to be assembled, chiefly in response to the needs of the Government, and which furnishes the element requisite for stability in a technical association. In a letter to Dr. William Darlington, dated December 16, 1819, Asbury Dickins, secretary of the Institute, explained: "Hitherto, I am sorry to say, our progress in all branches of our association has been slow and inconsiderable. It is to be observed, however, that the mere organization of a scientific institution among gentlemen, who are, for the most part, occupied in laborious official or professional duties, and who are scattered over almost every part of this extensive city, is a work requiring no little time and perseverance."

As here intimated, the Institute was essentially a society of amateurs in regard to the work it was designed to undertake, though this is said with no disrespect to the membership, which, as a whole, engaged with much zeal in promoting the interests they had elected to support. In this, as in most similar associations, however, it fell upon a few to keep interest alive and to perform the greater part of the actual labor; yet back of these were others always ready to respond when called upon, including a small number who gave exceptional distinction to the proceedings of the Institute. And, still others, again, were on the roll, who took little or no part in the programme, and whose connection was generally of short duration.

No complete list of the resident members in good standing at any period has been found. The subscribers to the Metropolitan Society in 1816 numbered 89, but it would appear that a large proportion of these failed to continue relationship with the Institute. During the first two years, or up to the close of 1818, the year in which the

charter was obtained, the total number of members mentioned by name in the minutes was 47. During all subsequent years 91 new resident members were elected, but some of these did not qualify, and others were dropped from the rolls from time to time for non-payment of dues. According to the treasurer's report in 1826 there were then 70 members, of whom about 55 settled their accounts; but during later years there was a constant falling off in the membership, which had become greatly reduced at the time of the dissolution of the society.

While giving credit to Thomas Law for the idea of the society, Dr. Edward Cutbush, its first president, was obviously the leading spirit in its organization and the chief exponent of its plans and advantages. His relations to the Institute were, in fact, not unlike those which, two decades later, existed between Joel R. Poinsett and the National Institution, and his activities continued, though with diminishing intensity, until his departure from Washington in 1826, his enthusiasm evidently having begun to decline when it became apparent that substantial aid was not to be expected from the Government. The prominence of others in the affairs of the Institute is brought out under the head of management and officers, and elsewhere in this paper, the intention in this connection being only to name, with their principal occupations, those members whose relations to the community have been ascertained, in order to indicate the character of the personnel of the society. The grouping is arbitrary, as many of the members were prominent in many directions.

As already stated, John Quincy Adams and Andrew Jackson were on the resident list even during their incumbency of the office of President of the United States. Of presidential cabinet members, each of whom, with two exceptions, served also in the Senate or House of Representatives, or in both, there were at least 13, namely, John C. Calhoun, Vice President and Secretary of War; Henry Clay, Secretary of State; William H. Crawford, Secretary of War and of the Treasury; Richard Rush, Attorney General and Secretary of the Treasury; Samuel D. Ingham, Secretary of the Treasury; James Barbour and Joel R. Poinsett, Secretaries of War; Samuel L. Southard and Mahlon Dickerson, Secretaries of the Navy; John M. Berrien and William Wirt, Attorneys General; John McLean and William T. Barry, Postmasters General.

The Army was represented by Generals Simon Bernard, Chief of Engineers, George Gibson and Alexander Macomb; Colonels George Bomford, Chief of the Ordnance Bureau, and Nathan Towson, Paymaster General; Surgeon General Joseph Lovell and Dr. J. A. Brereton; and the Navy by Commodore John Rodgers, Capt. Thomas Tingey, commandant of the Washington Navy Yard, Lieut. Charles Wilkes and Dr. Bailey Washington.

The judiciary had William Cranch, Chief Justice of the Circuit Court and prominent in many public affairs, Buckner Thruston, Associate Judge of the same court, Richard Bland Lee and Nathaniel P. Causin, Judges of the Orphans' Court; with Elias B. Caldwell, clerk of the Supreme Court of the United States, and William Brent, clerk of the Circuit Court.

Among the civilian officers and employees of the Government were Dr. William Thornton, Commissioner of Patents; Josiah Meigs, Chief of the United States Land Office; George Watterston, Librarian of Congress; Phineas Bradley, Assistant Postmaster General and banker; Col. Samuel Lane and Maj. William Noland, Commissioners of Public Buildings; Matthew St. Clair Clarke, clerk of the House of Representatives; Asbury Dickins, chief clerk of the Treasury Department; Thomas L. Thurston, librarian of the Department of State; Benjamin Homans, chief clerk of the Navy Department; Walter Jones, District Attorney and Major General of the District militia; William Lambert,[1] clerk in the Pension Office; William Elliot,[1] clerk in the Patent Office; Joseph Anderson, John Underwood, and Nathaniel Cutting. Connected with the city government were Robert King, surveyor of the city, and Isaac Roberdeau, who had been one of L'Enfant's corps of surveyors; William Hewitt, register of Washington; Thomas Munroe, postmaster: and William Prout, member of the city hall erection commission.

At least eleven of the members held the office of mayor of Washington during the period of the Institute, or immediately before or afterwards. They were Robert Brent, banker, who had also served as Judge of the Orphans' Court and as Paymaster General of the Army; Daniel Rapine, publisher; Dr. James H. Blake, a practicing physician; Thomas Carbery, Roger C. Weightman; Joseph Gales, jr., publisher; John P. VanNess, banker and at one time General of the District militia; William A. Bradley, banker; Peter Force and William W. Seaton, both publishers and active participants in city affairs; and Richard Wallach.

The medical profession furnished a large and prominent quota of the membership, including nearly one-half of the incorporators of the Medical Society in 1819. Besides Mayor Blake, already referred to, may be mentioned Dr. B. S. Bohrer, Dr. James S. Gunnell, Dr. Thomas Henderson, Dr. Henry Huntt, the first health officer of Washington, Dr. Alexander McWilliams, at one time a surgeon in the Navy, Dr. George May, Dr. Frederick May, Dr. Richard Randall, Dr. Thomas Sewall, Dr. John T. Shaaf, Dr. Thomas Sims, Dr. John

[1] Mr. Lambert was selected by the Secretary of State in 1821 to make the necessary observations for determining the meridian of Washington, in which he was assisted by William Elliot, publisher, mathematician, and city surveyor from 1832 to 1835.

M. Thomas, Dr. Tobias Watkins and Dr. Nicholas Worthington. The church supplied pastors of several denominations, five of whom also held clerical positions in the Government, as follows: Rev. Andrew Bigelow, Rev. Obadiah B. Brown, Rev. John N. Campbell, Rev. Ira Chase, Rev. R. R. Gurley, Rev. Dr. Andrew Hunter, Rev. James Laurie, first president of the Washington Botanical Society, Rev. Robert Little, Unitarian minister and one of the most notable preachers of the day in Washington, Rev. William Matthews, founder of St. Vincent's Orphan Asylum, Rev. Isaac Orr and Rev. Dr. William Staughton, who was the first president of Columbian College.

Of architects, besides Dr. Thornton, there were B. Henry Latrobe, Charles Bulfinch and George Hadfield, connected with the planning and erection of the Capitol; James Hoban, designer of the White House, and Robert Mills, designer of the Washington Monument. The local press, including writers, publishers and editors, was represented, in addition to the several already mentioned, by Jonathan Elliot, Pishey Thompson and Samuel L. Knapp. Among educators were Benjamin Hallowell, Prof. William T. Carroll, Rudolph Schaer and George E. Ironsides. Others who were active in the society included Daniel Carroll of Duddington, banker; Philip Richard Fendall, banker, lawyer and editor; Overton Carr, banker and one of the original land owners in the federal district; Col. Archibald Henderson and John McClelland, of the Washington Monument Society; John Law, son of Thomas Law, lawyer; Col. William Tatham, possessor of an important scientific library; John Coyle, jr., secretary of the Howard Society; Samuel Eliot, jr., vice president of the Washington Botanical Society; Tobias Lear, who had been Washington's private secretary; John Stretch, director of the Washington Library Co.; Timothy Winn, one of the incorporators of the Navy Yard Bridge Co.; Joseph Mechlin, Thomas P. Jones, Edmund Law and Benjamin L. Lear.

The minutes record the election of 122 corresponding members, but some transfers to and from the resident list occurred. There were apparently no rules for the selection of candidates for this class, but the nominees proposed were generally the choice of individual resident members and represented a diversity of callings. The list contains the names of 15 Senators, 28 Representatives in Congress, and at least 6 members of presidential cabinets. Among the few prominently representative of objects of the Institute were Dr. James Cutbush, brother of Edward Cutbush; Nathaniel Bowditch, mathematician, of Boston; Dr. William Darlington, botanist, of West Chester, Pa.; Jared Sparks, historian, of Cambridge; Col. John Trumbull, historical painter; Prof. Parker Cleaveland, mineralogist, of Bowdoin College; Ferdinand R. Hassler, first superintendent of the U. S. Coast Survey; Peter S. Duponceau, philologist, of Phila-

delphia; Prof. Benjamin Silliman, chemist and geologist, of Yale College; Noah Webster, lexicographer and author, of Connecticut; and Lieut. Col. John J. Abert, U. S. Corps of Topographical Engineers. Of foreign corresponding members there were 20, including the British and Russian Ministers at Washington.

Among the resident and corresponding members, the following later became prominent in connection with the National Institution and the founding of the Smithsonian Institution, namely, Joel R. Poinsett, Richard Rush; Senators Mahlon Dickerson, Daniel Webster, Levi Woodbury and Asher Robbins; Dr. William Darlington, Peter S. Duponceau and Lieut. Col. Abert.

PROPOSITIONS FOR PROMOTING THE OBJECTS OF THE INSTITUTE.

To carry out the work planned by the Institute would have required the command of large resources, but, notwithstanding that the membership seemed well endowed with energy and counted many men of high position and influence, the society was never successful in obtaining, with the exception of one small contribution, any outside financial aid.

Wholly dependent for its revenues on membership dues, which were at the rate of $5 annually until 1835 when they were reduced to $3,[1] such a large proportion of the members were constantly in arrears, many paying only the first subscription, that the size of the membership list at any time furnishes no clue to the amount of the income, which was, however, always very small and uncertain. Committees were appointed and collectors employed to call upon members, and drastic measures were adopted with respect to delinquents, but none of these means proved more than temporarily effective. The following facts, gleaned from the few treasurers' statements which are now available, illustrate the generally prevailing conditions. At the beginning of 1822 only 34 members appear to have been considered as in good standing, and some of these were in arrears. During 1825 the treasurer received $218.56 and reported dues unpaid to the extent of $584.62. The aggregate amount of dues collected during 1826 was $227.20; from January, 1828, to April, 1829, $364.75, with unpaid dues of $552.41; and from May, 1832, to February, 1833, $293.52.

As the proceeds from dues were scarcely sufficient for the incidental expenses of the society, various propositions were brought forward from time to time for raising an adequate fund, the principal of these being the holding of a lottery, the sale of public lots, appropriations from Congress, and voluntary contributions from the citizens of Washington. None of these schemes met with success,

[1] For some years the sum of $5 was payable at the time of election, and $5 regularly thereafter, beginning at the date of the next annual meeting.

though some were made the subject of petitions to Congress, as were also several matters not directly relating to pecuniary assistance.

On December 22, 1817, the committee on securing an act of incorporation was instructed to request authority of Congress to raise money by way of lottery to meet the necessary expenditures of the Institute. This action was evidently based on the following report from the committee on botany and agriculture, but it did not take form until four years later:

The committee to whom was referred a resolution of the general committee on the 3d ulto, report that they have had the subject under consideration, and that amidst a variety of schemes which have presented themselves to the minds of your committee to procure funds for the purpose of purchasing a botanical and agricultural library for the use of the Institute, the most practicable one appears to them to be that of a lottery. In addition to an extensive and valuable collection of books on these subjects, funds enough may be obtained in this way to lay out, ornament and embellish a botanical garden, to purchase a valuable cabinet of minerals, to erect a building for the meetings and accommodation of the Institute, and to defray all the necessary expenses of the different establishments over which it may have control and jurisdiction. The committee conceive that, by a petition to Congress, authority will be granted to raise a lottery, which might be disposed of to brokers advantageously to the society, and that thus funds would be procured, amply sufficient for all the purposes of the Institute for many years.

The Institute received its charter from Congress on April 20, 1818, and on October 5, the general committee earnestly recommended,

that measures be taken, either by an application to the Congress of the United States or by such other mode as the Institute may approve, for the obtaining of a lot within the City of Washington, on which a building may be erected for the reception and safe keeping of the books and other property, and for the meetings of the Institute or of its committees. That though your committee will not assent that without such provision of a permanent place of meeting the Institute will fail, yet they believe that its progress will be greatly retarded. That the Congress of the United States having granted a liberal charter, your committee have confident expectations that the Institute will adopt such measures as will prove the sincerity of their wishes to promote the arts and sciences.

On December 28, 1818, the committee appointed to prepare a memorial to Congress for a grant of public ground reported the following draft, addressed to the Senate and House of Representatives, which was read and agreed to by the Institute:

That by the fourth section of the act of incorporation, passed on the 20th day of April last, the said Institute is authorized to procure, by purchase or otherwise, a suitable building for the preservation and safe-keeping of a library and for a museum; and also a tract or parcel of ground, not exceeding five acres.

That, although the Institute has endeavored to avail itself of the privilege and advantage given by the above recited section, it has hitherto been unsuccessful therein, and it, moreover, has reason to apprehend that the accomplishment of this important object will, for a long time, be beyond its pecuniary means.

That the Institute having understood that among the public property in the City of Washington there is a reservation of more than twenty acres, situated at or about the junction of the Capitol park and the extension of the President's square, which have not been appropriated; and being desirous of erecting a hall and such buildings as might be hereafter extended for its accommodation, and of forming and cultivating a botanic garden; and believing that the western part of the aforesaid reservation would, for that purpose, be highly advantageous to the Institute, whose object and labors are intended solely for the public good, by the advancement of the sciences and learning, and would also tend to the furtherance of the views of the founder of this Metropolis:—The Institute, therefore, solicits that authority may be given to the President of the United States to invest it with as much of the said reservation (or if that should not be judged expedient, of some other public ground in the City of Washington) not exceeding five acres, as by him shall be deemed proper, as best adapted to the purposes of the Institute, and to the intention of the Government for the improvement of the Capital of this extensive empire.

February 21, 1820, a committee was designated to confer with the committees of Congress on the District of Columbia for the purpose of obtaining that the Mall shall be placed in the occupancy and under the superintendence of the Institute, in order that such part as may be proper may be applied to the promotion of the objects of the Institute, and the whole improved for the convenience and ornament of the city. The president also communicated a correspondence between himself and the chairman of one of the committees on the District respecting a bill for the grant of five acres of land. The above-named committee of the Institute reported on May 1 that a bill favorable to the Institute had passed the House of Representatives and was then before the Senate. This measure, which permitted the use of five acres of ground for a botanical garden, received the approval of the President of the United States on May 8, 1820, and on May 23, being accepted by the Institute under the conditions named,

The committee to whom was submitted the selection of a piece of ground for the use of the Institute report the square to the north of 406 and 430 as the most eligible in their opinion for this purpose, as it is the most central square in the city that can conveniently be had, lying in a very fine commanding situation and capable of being watered from some natural springs so much above it that the water, at a trivial expense, may be carried two feet above the highest part of the square, six feet above the middle of the square, and twenty feet above the lowest part. This square contains 4-1/8 acres of land.[1]

It was resolved on May 25, however, that the location of the five acres be made on the reservation at the east end of the Mall, between the Capitol and the canal, and between Pennsylvania and Maryland Avenues. A committee to wait on the President of the United

[1] This is the double square bounded by Seventh, Ninth, F and G Streets, northwest, subsequently occupied by the building of the Department of the Interior.

States and submit for his approbation the location agreed upon by the Institute reported that, on May 29, they had waited on the President, who was pleased to assign that portion of the eastern part of the Mall, near the Capitol, and that instructions had been given to the City Commissioner to locate five acres in that position. The committee also called on the Commissioner who informed them that in the course of a few days the public surveyor would mark off the spot for the purpose of enabling the Institute to effect the object of its incorporation, and that he would notify the president of the Institute of the day when the survey would be made.

The proposition submitted on December 22, 1817, for the holding of a lottery appears not to have been definitely formulated until February 3, 1821, when the draft of a memorial to Congress, the only one on the subject found among the papers of the society, was presented by Dr. William Thornton. In view, however, of the conditions then existing, its transmission to Congress was deemed inexpedient at that time, and it seems probable that no use was ever made of it. The draft was as follows:

> That, to carry into effective operation the grant of five acres of ground at the east end of the Mall, for which they are already indebted to the munificence of the legislature, they are, reluctantly, under the necessity of soliciting the further indulgence of Congress.
>
> The Institute are well aware that the prudence of those to whom the citizens of the United States have confided their most interesting concerns would not permit, at this juncture of general pecuniary embarrassment, those liberal aids which might, under more favorable circumstances, be consistent with the public welfare. Under these impressions, the Institute solicit the permission to raise the necessary funds for enclosing the grounds, for the erection of their hall—their laboratory,—their hot and green houses,—their library and museum, and for the cultivation of the botanic garden, wherein they hope soon to present to the view of their fellow citizens specimens of all the plants of this middle region of our country, with others exotic and domestic; and the only plan that they can now suggest of raising the funds necessary for carrying into effect their views and endeavors to be useful will be by a lottery, which if, in some respects, liable to objection, may in some other respects be considered as a voluntary subscription for the promotion of a great national object.
>
> Your petitioners, therefore, most respectfully solicit your honorable Houses to grant them permission to raise a sum not exceeding thirty thousand dollars by a lottery, the proceeds of which will be dedicated solely to the objects set forth in this address; or to extend to them such other aid for the promotion of those objects as, in their wisdom, Congress may think more advisable.

The sale of public lots in the city of Washington, which also required the authority of Congress, was next proposed as a proper means for acquiring the funds desired. This plan was first mentioned in the minutes for February 2, 1822, where it was coupled with the question of obtaining an extension of the botanic garden. The concurrence and aid of Daniel Carroll of Duddington were solicited, and the draft

of the memorial prepared for submitting to Congress, bearing date of February 6, was as follows:

The Columbian Institute respectfully represents,—That while they feel truly sensible of the obligations they have already experienced from the Congress, in fostering this institution, intended solely for the promotion of science and useful knowledge, they consider it as a duty to state that they once entertained hopes that they might with propriety have solicited permission to endeavor to derive some pecuniary aid for carrying into effect the plans which had received the sanction of the enlightened bodies whom they have now the honor to address, by the establishment of a lottery; but when they were contemplating the probable success of such an application, some doubts were entertained of the propriety of the measure, and they declined it, preferring a resort to any mode deemed less exceptionable of forwarding this national object; and they cannot conceive any mode which promises such freedom from objection as the one they have now the honor of respectfully submitting.

Their efforts have been hitherto very much confined by the want of those pecuniary resources, which in the infancy of the society are absolutely necessary; for every expense in enclosing and preparing the ground, with the incidental expenses of the meetings of the society, from time to time, have been defrayed by the private resources of the resident members; but when the society contemplate the erection of a convenient building for their sittings and for the reception of their valuable acquisitions, they find themselves totally unprepared to proceed with the vigor which would render the society respectable. They are therefore constrained to request such aid as will be considered perfectly compatible with the never-ceasing regard which has been exhibited by your honorable Houses to the utmost economy; for this will only bring into activity what may be considered as a latent good. There are two open pieces of ground, one to the south of square 633, the other to the north of square 635, as laid down by dotted lines in King's map of the City. These belong to the public, and if ceded to the Columbian Institute they might be laid off into building lots and be disposed of for the benefit of this public institution, and the proceeds laid out in such improvements of the ground dedicated to the use of the Institute as may be judged proper. The society therefore respectfully beg leave to suggest that they be favored with a cession of the two open places above mentioned, to be laid out in conformity with the general plan of the City; and they further solicit from your honorable Houses the sole and exclusive right to occupy the remainder of the ground to the west of that now enclosed, which lies between the ceded ground and the street that runs north and south laid down in the map of the City as First Street west, on the same terms as before granted, which would not only preserve the garden free from intrusion (by its being surrounded with streets) but it would add greatly to the value of the whole appropriation by giving more extent to the various designated portions for the forest trees and plants of this very extensive Republic.

This matter, as also the enlargement of the garden, was again referred to in the minutes for January and February, 1824. On February 7 a memorial for the extension of the area of the garden was read and ordered presented to Congress. It was followed by the passage of an act granting the request, approved May 26.

On January 28, 1826, the sale of lots was the subject of a lengthy committee report, following failure to obtain assistance from the

Commissioners of the City from the proceeds of a similar sale. The draft of the petition prepared for Congress is missing, but it undoubtedly conformed more or less closely with the report, which not only entered into much detail but is interesting as proposing benefits to the Capitol and Capitol grounds as well as to the Institute. A brief abstract will answer in this connection.

The purpose of the memorial to Congress was to secure aid to enable the Institute to build a wall around the botanic garden, to bring the water of the eastern branch of Tiber Creek to Capitol Hill, to cultivate the garden, and to erect the necessary buildings therein, the entire expense of which was placed at $30,000. The length and cost of the wall were given. Water could be taken from the eastern branch of Tiber Creek at a level sufficiently high to reach the top of the windows of the second story of the Capitol building and be brought to the Capitol grounds in 6-inch cast iron pipes at not exceeding $16,200. A reservoir in those grounds would be a great security in the event of fire, and the water might be carried into every room in the Capitol, afterwards serving to water the botanic garden, etc. The application of the proceeds of the sale, it was proposed, should be under the direction of the Commissioner of Public Buildings and the Columbian Institute.

The matter of securing funds in the same manner was again brought up early in 1828, and is mentioned in the minutes of several subsequent meetings until the spring of 1830. No drafts of reports or petitions prepared during this period are preserved in the files, but at least one memorial reached Congress, in 1828, and failed of consideration through a misunderstanding on the part of the House Committee on Public Buildings.

In the early part of 1830 Thomas Law presented a paper on a botanical garden and a building for the Institute, accompanied with plans and estimates, which, with a draft of a memorial by Judge Cranch, were referred to a committee with instructions to prepare a petition to Congress. The immediate presentation of this petition was withheld, and there is no record of its having been subsequently transmitted, though it may have been.

While some of the petitions presented or prepared for presentation to Congress for assistance in the manner above described contained a vague intimation that another form of financial aid might be more highly regarded by Congress, there seems to have been only one direct appeal for an appropriation of money, which was made in the form of a resolution, submitted to the society on July 2, 1825, the disposition of which is not recorded, as follows:

Resolved, that the President of the United States be requested to recommend to Congress the importance of establishing at the seat of the general govern-

ment a Botanical, Horticultural and Agricultural Garden; and that he ask for a small appropriation for carrying the same into effect, under the direction of the Columbian Institute.

A proposition entertained in 1821 was to solicit subscriptions from the citizens of Washington, at the rate of one dollar per capita, for enclosing and cultivating the botanic garden, and a committee was appointed to carry it into effect, but the scheme was evidently abandoned without actual trial.

The Institute made its last appeal to Congress at the end of the calendar year 1836 or the beginning of 1837. First Street had just been cut through, and the society had also been deprived of the land to the eastward of that street, which had been covered into Capitol Square. There remained the length of two blocks, from First to Third Streets, the exact location and area of the present Botanic Garden, but the charter of the Institute was to expire in 1838, and its meetings ceased in 1837. The continuance of the society, however, was desired by some of the members, and the memorial to Congress at this time had that in view, but whether the further maintenance of the garden was also in mind, the writer has not been able to ascertain. The chief object of the memorial was to secure funds for the erection of a building at the southwest corner of Pennsylvania Avenue and Third Street, northwest, for its collections, library and meetings; and the use of that site for this purpose had been granted, under certain conditions, by the President of the United States.

No copy of this petition has been found, but it is known to have requested of Congress the reimbursement of the sum, estimated at $1,500, expended on the garden in draining, fencing, planting shrubs and trees, and constructing gravel walks. It was also stated to be the intention of the society to use the money in erecting a building where the Institute could hold its meetings and where exhibitions could be given of the works of American artists in sculpture and painting.

The memorial was presented in the House of Representatives on January 9, 1837, was referred to the Committee on Public Buildings, and was described in unprinted records of the House "as praying compensation for expenses incurred in cultivating and ornamenting a certain piece of ground, heretofore granted for the use of the Institute and recently resumed by the enlargement of the Capitol grounds." On February 14, the committee made a favorable report, "accompanied by a bill (No. 934), for the relief of the said Institute, which bill by leave reported was read the first and second time and committed to a committee of the whole House tomorrow." What, if

any, further action was taken, has not been learned, but the bill did not pass. The report of the Committee was as follows:

24th Congress, 2d Session. Report No. 226.

House of Representatives.

Columbian Institute.

(To accompany bill H. R. No. 934.)

February 14, 1837.[1]

Mr. Ward, from the Committee on the Public Buildings, made the following Report:

The Committee on the Public Buildings, to which was referred the memorial of the Columbian Institute of the city of Washington, respectfully report:

That, about fifteen years ago, the Congress of the United States granted to the Columbian Institute a part of the public ground west of the Capitol, for the use of said Institute, till wanted by Government; that, during the last year, a considerable portion of the ground thus granted was required to enlarge the Capitol square on the west front; that during the occupancy of said ground by the Columbian Institute, they had it well drained, fenced in, planted with shrubs and trees, and several gravel walks made, at an expense of $1,500. The memorialists pray that Congress will return the said sum of $1,500, to be expended in erecting a building in which to hold their meetings, and for the exhibition of the works of American artists in sculpture and painting.

The committee are of opinion that the prayer of the memorialists is reasonable, and therefore report a bill for their benefit.

MANAGEMENT AND OFFICERS.

The constitution of 1816 provided that the officers for managing the general concerns of the Institute should consist of a president, four vice presidents, a secretary, a treasurer and four curators. A general committee was also constituted, composed of 14 members, two to serve, respectively, as chairman and secretary, the remainder being formed into four departments or subcommittees of three members each. The officers were, *ex officio*, additional members of the general committee, the subdivisions of which were as follows:

A corresponding committee, the duty of which shall be to correspond with naturalists or other persons in the different sections of the United States, to solicit and receive all specimens and communications embraced in the objects of the Institute; to correspond with the amateurs of botany, natural history, agriculture, etc., of other countries; and, unless otherwise ordered by the Institute, to conduct all correspondence.

A committee on mineralogy, to which shall be submitted all questions, communications and specimens of every kind, embraced in the third article of the first section of the constitution.

A committee on botany and agriculture, to which shall be submitted the execution of the second article of the first section of the constitution, and they shall arrange and deliver over to the curators such specimens as will not admit of cultivation. This committee shall also be charged with the superintendence of the Botanical Garden.

A committee on general subjects, to which shall be submitted all communications which may be received, connected with the fourth, fifth and sixth articles of the first section of the constitution. This committee shall report to the general committee on all communications which are embraced in any or all of the aforesaid articles, and shall endorse those which, in their opinion, are most worthy of publication; they shall then be delivered to the curators for preservation.

The general committee were also empowered to direct the application of the funds of the Institute to such purposes as they may deem proper; and to do all acts that will promote the general interests of the Institute, etc.

The curators shall take charge of all original communications and file them under their respective heads; also, specimens which are not to be cultivated in the botanical garden; also, all drawings, books, etc., belonging to the Institute, and shall keep a book with a list of donations, with the names of the respective donors and their places of residence.

The election of officers and of the general committee were to be held annually, and seven members, exclusive of officers, were made a quorum for the transaction of business at meetings, except for altering the constitution and electing honorary members.

The administrative arrangements were greatly simplified by the constitutional ordinance of 1820, under which, as already explained, the Institute was divided into five classes, namely, mathematical sciences, physical sciences, moral and political sciences, general literature and the fine arts. Resident members were required to indicate the class to which they wished to belong, and those of each class were expected to specially charge themselves with the investigations of the objects embraced therein.

The officers were to consist of a president, vice president, secretary, treasurer and five counsellors, one for each class. The secretary was given charge of all communications, while the counsellors were to have a regard to the interests of their respective classes, and report to the Institute whatever they might deem beneficial to them. The officers, together, were made a board of administration, with a general superintendence of the affairs of the Institute, and of the hall,

library, museum, observatory, philosophical and other apparatus, and of the botanic garden, and of all other property and effects belonging to the Institute. The quorum for meetings was reduced to five members.

The presidents of the Institute, in the order of succession, were Edward Cutbush, Josiah Meigs, John Quincy Adams, John C. Calhoun and Mahlon Dickerson. The vice presidents between 1816 and 1820, when four such officers were elected annually, included Andrew Hunter, J. T. Shaaf, Thomas Law, Joseph Anderson, Robert Brent, William Thornton, Edward Cutbush and Samuel H. Smith. Subsequently this office was held by Dr. Cutbush for 5 years and by Judge William Cranch during the remaining 12 years. Nathaniel Cutting served as secretary until October, 1818, and Asbury Dickins during the entire balance of the period. The treasurers were Overton Carr, John A. Brereton, William Lambert, Bailey Washington, and William Elliot.

The curatorships from 1816 to 1820, when these offices were abolished, were filled by Elias B. Caldwell, John Law, R. C. Weightman, Robert Brent, William Thornton, Samuel H. Smith, Joseph Anderson and Andrew Hunter. The general committee of 14 members during the same period included Samuel H. Smith, John A. Brereton, Alexander McWilliams, B. H. Latrobe, Walter Jones, Henry Huntt, William Thornton, George Watterston, Edmund Law, Benjamin Homans, William W. Seaton, Joseph Mechlin, William Tatham, James H. Blake, Josiah Meigs, Asbury Dickins, Rudolph Schaer, George May, Benjamin L. Lear, George Bomford, William Elliot, George Hadfield, Thomas Henderson, John Law and Nicholas Worthington.

The complete list of counsellors, of which 5 were elected annually under the provisions of the constitutional ordinance of 1820, was as follows: William Thornton, Henry Huntt, Alexander McWilliams, Joseph Gales, jr., George Hadfield, John Quincy Adams, Bailey Washington, William Elliot, Tobias Watkins, Thomas P. Jones, William W. Seaton, William Cranch, Thomas Law, Robert Mills, Matthew St. Clair Clarke and William Noland.

MEETING PLACES.

Until 1824 the Institute was without a permanent place for its meetings and collections. The meetings for organization in 1816 were held at McKeowin's Hotel on Pennsylvania Avenue at Sixth Street, northwest. During a part of 1817 and 1818 use was made of the school room of Rudolph Schaer in the General Post Office building (Blodget's Hotel) at the northeast corner of E and Eighth Streets, northwest, followed by the occupation of another room in the same

building furnished by the Postmaster General. From early in 1820 until the end of 1822 the Institute was evidently located in the building of the Treasury Department, whence it moved to the new City Hall, on Judiciary Square, in which the Mayor of the city had provided a light and dry room in the basement story for the minerals, etc., tendering his own office for meeting purposes. The cabinet was transferred to these quarters on December 7, 1822.

In February, 1824, and possibly also at an earlier date, Congress was memorialized on the subject of accommodations for the society at the Capitol. The western extension of the center building of the Capitol, mainly for the purpose of furnishing suitable quarters for the Library of Congress, completed in this year, added a number of rooms, especially in the first and second stories, not needed for the Library. The disposition of these, chiefly required for committees, was confided to a joint committee of Congress, with Senator Mahlon Dickerson as chairman. Reporting on May 21, 1824, regarding the assignments made, the committee recommended "that, until Congress shall make a further disposition of the large room under the Library in the second story, the same may be occupied by the Columbian Institute as a place for holding their meetings, and a place of deposit for their books, papers, furniture and collections." This room, located in what is now known as the ground story immediately under the former main apartment of the Library of Congress, and with a western outlook, was numbered 44, and measured 30 by 42 feet.

The first information regarding this grant seems to have been announced to the Institute on June 1 by John Quincy Adams, then president of the society, in a letter to the secretary, in which he suggested the propriety of having the room prepared and the property of the Institute collected and moved into it before the next regular meeting to be held on the 5th. Circumstances, however, caused some delay in making this transfer, as, on August 7, a committee to wait on the Commissioner of Public Buildings reported to the society that the Commissioner had agreed to provide out of the funds appropriated by Congress for furnishing the new rooms in the Capitol the following articles of furniture: Two mahogany tables with green covers, 6 feet long, 20 chairs, 2 mahogany bookcases, 2 mahogany washstands, 2 sets of fire irons and fenders, and a carpet. On November 2, 1824, the Institute was informed that the room was ready, and while it is to be presumed that use was at once made of it, nearly a year later, or on August 6, 1825, the minutes record that a bill of $1.50 was ordered paid for moving the property of the Institute from City Hall to the Capitol. On September 3, following, the Commissioner of Public Buildings was requested that the room

be furnished with stoves and shelves, while on January 14, 1826, it was ordered that the room of the Institute be warmed at its own expense. Two years later, May 5, 1828, a resolution was recorded to the effect that the board of administration be instructed to take measures for obtaining of the proper officer a room in the Capitol suitable for the purposes of the Institute. This was owing to the fact that in consequence of certain structural changes in connection with this part of the building it became necessary in 1827 to divide the large room. No evidence of a change in location has been discovered, however, and the double room was undoubtedly continued in the occupancy of the society during the remainder of its existence. Some of the important public meetings of the Institute were held in the hall of the House of Representatives.

MEETINGS, COMMUNICATIONS AND PUBLICATIONS.

Meetings.—The constitution provided for only two stated meetings annually, on the first Monday of October and April, respectively, though special meetings might be convened by resolution of the Institute, or by the president with the concurrence of five members of the general committee. The constitutional ordinance of 1820 stipulated an annual meeting on the last Saturday of each year, a stated meeting on the first Saturday of each month, and special meetings whenever three members concurred in a request to that effect. Later the meeting day was changed from Saturday to Monday. From the beginning there was difficulty in securing programs for the meetings and on December 25, 1824, a report was submitted and discussed, in which it was proposed that members be chosen by ballot to furnish communications in turn on any art or science each may select, and that a fine be imposed for failure to comply.

By the standing rules amended May 6, 1826, "Weekly sittings of the Institute, at which scientific and literary productions may be read, shall be held during each session of Congress; for the rest of the year only stated meetings shall be in order, and the increase and arrangement of the library, cabinet, philosophical apparatus and botanic garden be special objects of attention." These weekly meetings, however, evidently began as early as December, 1825. The method of procedure in obtaining papers for them was defined by the rules, as follows: "At the first meeting after the rising of Congress the names of the members who are expected to prepare papers for the next winter shall be entered on the minutes. The specific order in which they are to be produced shall be determined only four weeks previous to the reading of the papers; that is, on the stated meeting in the month immediately preceding each session of Congress, four of the papers shall be assigned to be read in the four

weeks succeeding the commencement of the session; and thereafter one member shall be nominated every week, to read in his turn, until the session is ended."

The minutes record the proceedings of 177 meetings, but there were many meeting dates on which no quorum appeared, especially during the later part of the life of the society, when there were sometimes as few as two meetings in the course of a year instead of twelve. A large number of those recorded were, moreover, adjourned and special meetings. It would also appear that the meetings generally were made but little interesting, having been mostly devoted to such business matters as the election of members and officers, finances, resolutions, and reports on the botanic garden, cabinet, library, meeting places, etc. The number of papers actually read was relatively very small, and so few accessions both of specimens and books were recorded in the minutes as to make it appear that this character of information was not generally entered in that connection. They were supposed, however, to be reported in the *National Intelligencer*.

At one meeting in 1817, 30 members were recorded as present; at 54 meetings the number ranged from 10 to 24; while at all the others the attendance was only from 5 to 9 for each. At anniversary and memorial meetings for public addresses, several of which were held in the hall of the House of Representatives, a considerable attendance is generally noted, including members of Congress, military and civilian officers of the Government, members of the diplomatic corps, ladies and the public generally, and music was sometimes furnished. Reference is also made to annual dinners of the members, and in a few instances to the serving of refreshments at meetings.

It is interesting to note here that, on April 7, 1828, Col. John Trumbull returned thanks to the Institute for the use of the hall in the Capitol, which had been granted him for the purpose of completing his national pictures,[1] and that, on December 24, 1836, Mr. John Vanderlyn was given permission to occupy the hall for painting his rotunda panel. At the beginning of 1830 the hall was also utilized for a medical convention.

Communications.—The minutes record 85 papers presented by 26 members, which, with very few exceptions, were entered only by title. Not more than one appears to have been published by the Institute, and as but a small number in manuscript form are contained among the papers now available, it is impossible to judge as a whole of the merits of this part of the society's proceedings.

The principal contributor was William Lambert, with 44 original communications, astronomical and mathematical, many of which

[1] The work here referred to was the drying of the four paintings and their treatment with a composition to prevent further damage from moisture.

had reference to determinations of latitude and longitude, and several to measurements of the earth's surface. It was mainly through his work that the question of a national observatory at Washington was taken up and recommended by the Institute, and at the meeting of April 6, 1822, copies were presented of the message of the President of the United States communicating to Congress Mr. Lambert's report on the subject of the longitude of the Capital. Twenty-one papers by other members related to astronomy, mathematics, physics, mechanics, etc. Four of these were records of meteorological observations in the District of Columbia, while the following three received special attention from the Institute: The first, by Dr. Alexander McWilliams, was an exhibition, with model, of his invention called the "ship gauge," for finding the trim and draft of water of a ship, which was made the subject of an extended examination and of a favorable report by a committee of the Institute; the second was by Capt. John Thomas on his improvements in ship building, and had the same consideration; while the third was by Commodore Barron on the construction of bellows for pumping the foul air out of ships.

Of four papers on botany, one was a Florula Columbiana by William Elliot; another was a list of the plants of the District of Columbia, transmitted by the Washington Botanical Society; and a third was on a national herbarium by Dr. Darlington. Two treated of the silk worm, one of fossil remains, and one, by Dr. Henry Huntt, of a change of climate in pulmonary consumption. Thomas Law made four communications on monetary subjects, namely, On the necessity of a national paper as a circulating medium, established on the authority of the United States; On national currency (of which 500 copies were printed by the Institute); On a monetary system; and Some remarks on the currency.

It appears to have been the rule that the papers submitted to the Institute became its property, but permission to withdraw some of them for publication elsewhere is noted. It was the intent of the society to issue transactions consisting of such communications as were worthy of being so perpetuated, and steps were taken to make selections for a first volume, but this was prevented by the lack of means.

Public addresses.—There were six public addresses, all having much merit and all of which were printed in pamphlet form. One was given in Congress Hall, while three were delivered in the hall of the House of Representatives, and two in the room of the Institute in the Capitol. The first, to which reference has already been made, was by Dr. Edward Cutbush, On the objects and aims of the Institute. Three were anniversary addresses given, respectively, by Dr.

Tobias Watkins on January 7, 1826; Samuel L. Southard, Secretary of the Navy, on December 31, 1827; and Senator Edward Everett on January 16, 1830. Two were memorials, one on the life and character of Thomas Jefferson, by Samuel Harrison Smith, his close friend, on January 6, 1827; the other on the life and character of John Adams, by Judge William Cranch, on March 16, 1827. With the exception of the discourse of Dr. Cutbush, none of these dealt specially with the objects and work of the Institute. Mr. Southard, according to the diary of John Quincy Adams, spoke upon the obligation of the Government of the United States to patronize science. "He maintained the cause with great zeal and ability, arguing it as a duty resulting from our situation among the nations of the earth, and recurring specially to the expressed opinions of Washington, Jefferson and Madison." Mr. S. L. Knapp characterized Mr. Everett's address as a "splendid performance. Line upon line and precept upon precept are still wanted to rouse our Government to become the patron of letters, the arts and sciences, and the friend to the learned men of the country."

Publications.—Though contemplating the issuance of a series of transactions or proceedings, sufficient funds for this purpose were never available, and the publications left by the Institute consist of only a few isolated pieces, comprising, besides the six public addresses noted above, a quarto pamphlet, printed in 1817, containing the proceedings in the organization of the Institute and the constitution; the constitutional ordinance of 1820; one of the sets of standing rules; a paper by Thomas Law on the national currency of the United States; and a circular of instructions for collecting and preserving specimens. Notices of the Institute and acknowledgments for donations were, in part at least, printed in the local papers.

BOTANIC GARDEN.

A botanical garden was among the projects considered by President Washington for the Federal City, and its location was the subject of correspondence between him and the Commissioners of the Federal District. The latter, writing to Washington on October 1, 1796, discussed

> the disposition of the public grounds in the city, and having already recommended sites for the national university and mint, they add that the establishment of a botanical garden has been lately suggested, and if the site proposed, which is not named, does not meet with the president's approval that a portion of the national university site can be devoted to that purpose.[1]

The President, replying on October 21, decided in favor of the square bounded by Twenty-third, Twenty-fifth and E Streets, north-

[1] W. B. Bryan. A History of the National Capital, vol. 1, p. 276, 1914.

west, the Potomac River being on the south, as the site for the university,[1] and added:

> Conceiving (if there be space sufficient to afford it) that a botanical garden would be a good appendage to the institution of a university, part of this square might be applied to that purpose. If inadequate, and the square, designated in the plan of Major L'Enfant for a Marine Hospital, is susceptible of that institution and a botanical garden also, ground there might be appropriated to this use. If neither will admit of it, I see no solid objection against commencing this work within the President's Square, it being previously understood that it is not to be occupied for this purpose beyond a certain period; or until circumstances would enable or induce the public to improve it into pleasure walks.

The establishment of a botanical garden at the National Capital was also not infrequently the subject of communications by various writers, printed in the public press and elsewhere, in which the importance of such an institution both to the science and application of botany was discussed. In the opinion of a contributor to the *National Magazine* for December 1, 1801,

> Perhaps nothing would tend more to benefit this city and the Nation at large than that the seat of the general government should be the depository of the arts and sciences. With this impression, I have sometimes speculated on fanciful improvements, and imagined the President's house converted into a National Museum, where, as in Paris and London, a National Institute might be established and lectures read. * * * Such speculations, however glad I might be to see realized, are attended with difficulties, which do not obstruct the following lands being appropriated for public use, which are well calculated for the purpose. I cannot help recommending it to all those who wish to promote a scientific knowledge of the various branches of agriculture. The plan I propose is to lay out about 50 acres of land for a botanic garden in this city, in the following manner:

The writer then proposes five branches of the garden, each of which he describes with considerable detail, while several others are merely mentioned. The first was a Linnean garden, calculated for the botanist who studies plants scientifically, and designed to contain every possible variety of plant. The second was a cattle garden in which should be grouped separately the plants preferred by, wholesome or unwholesome to, cattle, sheep, horses, goats and swine, respectively. The third was a hay garden, to contain all plants of which hay can be made, which, with the preceding, would serve to instruct the practical husbandman. The fourth was an esculent garden, to show every plant which furnishes food for man; while the fifth was a dyer's garden, containing all plants which afford any assistance in dyeing colors. The other provisions were for rock plants, creepers and climbers, bog and water plants, marine plants, an herbarium and a nursery. Included in the scheme of the writer were also extensive series of lectures, both scientific and practical.

[1] This site was subsequently used for the Naval Observatory, and is now occupied by the Hygienic Laboratory of the Bureau of the Public Health Service.

Another article, the author of which signed himself "Franklin," was published in the *Washington Expositor* of January 9, 1808, under the title "Proposals for establishing an experimental agricultural and botanical society at the seat of the general government." The writer prefaces by stating that

> Approaching, as we seem to be, the period when it will be necessary for our country to put forth all her resources; when improvements in agriculture, in arts and in manufactures will be encouraged and cherished, as the sinews of our strength; we cannot too early lay the foundations of those societies, which the experience of other nations has found so conducive to their prosperity. To render us independent, we must raise and naturalize those plants, the products of which are, by custom, rendered necessary to our comfort and convenience. All those vegetable productions of other nations, which our varied clime will nourish and support, particularly such as may become useful to our infant manufactures, ought to receive public attention. Gardens and nurseries, capable of receiving and propagating them, where the chemist, botanist and agriculturist can have free access at all seasons, will, it is hoped, now become of peculiar interest to the patriot and legislator. * * * For objects of this nature there is certainly no place better adapted than the seat of the general government. The climate of Washington is calculated for the production of a greater number of plants than a much more northern or southern situation would be. Here reside during the winter and in the spring intelligent members from all parts of the union, who will have an opportunity of knowing the result of the experiments made. * * * Within the limits of the federal seat there are large and ample reservations for public gardens and other national objects, which may advantageously be applied to the purposes of a botanical garden, a public nursery and an agricultural farm.

The society proposed was to consist of share holders, not exceeding 500, organized after the manner of a scientific association.

> The primary objects of the society are to collect at the seat of the general government the useful and ornamental vegetable productions; and, by experiment, ascertain the mode of culture for each best adapted to the climates and circumstances of the United States; as also to form a nursery and repository of seeds, from whence they may be easily disseminated through the United States. To this end they may take a lease of one or more of the large central reservations of land for public use in the city of Washington; and, whilst realizing their own views, render an essential service to the place; for, as a remuneration for the use of the grounds, the society might plant and protect such trees as will be wanted for their future ornament. They would likewise be enabled, from their nursery, to supply at reasonable rates such trees and shrubs as may be required when the grounds occupied by the public buildings of the United States are put in order. * * * Seeds of the most useful, as well as the most rare and beautiful plants, may be had from the society, and their freshness at all times depended upon.

It remained, however, for the Columbian Institute to make the first actual trial, which was carried sufficiently forward to demonstrate the importance and utility of such an establishment, and only failed in attaining its ultimate purpose through the lack of proper support.

Establishment, location and extent of the garden.—One of the principal objects proposed in the organization of the Institute, the establishment of its botanic garden is probably to be considered as its most important achievement. The Metropolitan Society, according to its plan of June 15, 1816, had "in contemplation to apply to Congress for the appropriation of about 200 acres of ground, called 'the Mall,' which was designed in the original plan of the city for a public garden. In this place it is proposed to cultivate the plants and seeds which may be presented to them; and as they multiply, to distribute them throughout this extensive continent." At a later date it was explained that, with sufficient aid, the botanic or national garden may be used to cultivate all kinds of indigenous trees, shrubs, roots, grasses, etc., to be distributed to every part of the United States. Beautiful shady cool walks may be formed, yielding a pleasant and healthy means of recreation, and the science of botany may be improved and encouraged.

By the act of incorporation, approved April 20, 1818, the Institute was authorized to procure, by purchase or otherwise, a tract or parcel of land for a botanic garden not exceeding 5 acres. Beginning at a meeting on October 5, in that year, the subject of obtaining a lot for a building as well as a garden was given frequent consideration. In the draft of a memorial to Congress, agreed to on December 28, though possibly not used, mention is made of a reservation of 20 acres situated at or about the junction of the Capitol Park or Mall and the extension of the President's Square, in which the 5 acres for the Institute might be advantageously located.

As a result of correspondence between the president of the Institute and the Committee of Congress on the District of Columbia, the following bill was passed by Congress and received the approval of the President on May 8, 1820:

Statute I. Chap. LXXXI.—*An Act for the benefit of the Columbian Institute, established for the promotion of Arts and Sciences in the city of Washington.*

Be it enacted, &c., That there be granted, during the pleasure of Congress, to the Columbian Institute for the promotion of Arts and Sciences, the use and improvement of a tract of public land in the city of Washington, not exceeding five acres, to be located under the direction of the President of the United States, for the purpose of enabling the said Columbian Institute to effect the object of their incorporation: *Provided*, That whenever the said Institute shall be dissolved, or cease to exist, or to employ the said tract of land for the purposes aforesaid, all right, title, and interest, hereby granted to the same, shall revert to, and vest in, the United States, as completely as if such grant had never been made. (Sixteenth Congress, first session. From Private Statutes at Large, U. S. A., 1789–1845, vol. 6.)

The conditions of this grant were accepted by the Institute on May 23, and on the same date the committee to select the site recommended as, in their opinion, the most eligible, as it was the most

central, the square enclosed between Seventh and Ninth and F and G Streets, northwest, containing 4⅛ acres, subsequently used for the building of the Patent Office. It was here that the greenhouses for the living plants brought home by the United States Exploring Expedition in 1842 were first located, but for some reason not recorded in the minutes, the attention of the Institute was almost immediately turned from the Patent Office site to the extreme eastern end of the Mall, and on May 29, 1820, the agreement of the President of the United States to this selection was reported to the society. On the plat of the measured ground, signed by J. Elgar, Surveyor of Washington City, it is said to have been laid out August 12, 1820, but this information appears not to have been officially communicated to the Institute until October 11, when Mr. Elgar states in a letter that he is ready to show the metes and bounds. It was, moreover, not until April 10, 1821, that a certificate confirming the location was signed by the President; and as late as September 1, 1821, a resolution was passed by the Institute calling upon the Commissioner of Public Buildings to put the Institute in full and complete possession of the ground. Certain steps looking to the improvement of the site seem, however, to have been taken during the latter part of 1820, though apparently it was not until the summer of 1821 that activities in this direction were actually begun.

In the certificate by the President, which conforms with the plat, the grounds, being part of public reservation No. 2, were described as follows: "Beginning at a point in the south line of Pennsylvania Avenue, where said line intersects the circular road west of the Capitol, and running thence westwardly bounding on said line, 627 feet 8 inches; then due south, 578 feet 10½ inches, to the north line of Maryland Avenue; then bordering on said line eastwardly, 627 feet 8 inches, to the circular road aforesaid; then bounding on said road, to the first beginning, containing 5 acres of ground."

The Capitol grounds at that time were much less extensive than at present, and were bordered near the base of the steep slope on the west of the Capitol by the circular road above mentioned, to which both Pennsylvania and Maryland Avenues extended. The place of these avenues in the grounds, though reduced in width, is now taken by the two broad walks leading to the western entrance of the building. Moreover, First Street had not then been carried through at this place, and the grant to the Columbian Institute extended continuously from the circular road to a point between First and Second Streets, in the shape of a truncated triangle of which the north and south sides were equal.

This tract the Institute began to improve and cultivate, but in 1822 the question of its enlargement was agitated and was embodied in

the draft of a petition to Congress placed before the society on February 6 of that year, but possibly not transmitted. In this draft it was said

> and they further solicit * * * the sole and exclusive right to occupy the remainder of the ground to the west of that now enclosed (to Second Street), on the same terms as before granted, which would not only preserve the garden free from intrusion (by its being surrounded with streets) but it would add greatly to the value of the whole appropriation by giving more extent to the various designated portions for the forest trees and plants of this very extensive Republic.

Just two years later, February 7, 1824, a petition in the same words or to the same effect was ordered presented to Congress, where it received favorable consideration, resulting in an act approved May 26, granting

> The use and improvement of the tract of public ground in Washington City, which is bounded on the east by the Botanical Garden, in the occupancy of the said Columbian Institute; on the north by Pennsylvania Avenue; on the west by the Tiber and Canal; and on the south by Maryland Avenue.

This extension was, in fact, essentially to the position of Third Street, and, accordingly, the grounds so enlarged comprehended the area of the present United States Botanic Garden, plus the width of First Street and the tract reaching therefrom to the circular road near the Capitol. Of this entire area the Institute remained in control until practically the close of its activities, the extension of the Capitol grounds to First Street and the opening of the latter taking place in 1836.

The entire Mall at this time was not only not improved but was in an unprotected and desolate condition. Its northern side and eastern end were moreover low and swampy and frequently invaded by the waters of the Tiber and the canal. The Institute, which was the first establishment privileged to make use of any part of this tract, had much difficulty in overcoming these conditions, which were more or less improved during its occupancy of the site under the direction of a municipal commission formed to deal with draining the lowlands south of Pennsylvania Avenue. After the abandonment of the garden, the Mall remained unoccupied until the selection of the site for the Smithsonian Institution between Ninth and Twelfth Streets, in 1846.

Enclosure of the garden.—A committee to consider plans for enclosing the ground reported on June 20, 1821, that they believed a good board fence, 5 feet high, with a live fence of American thorn planted inside of it, would answer every purpose required; for before the board fence had entirely decayed the live fence would have risen sufficiently high to be both secure and ornamental. Such a board fence, entirely enclosing the garden, was completed by October 6 in

that year, but there is no evidence of the placing of the so-called live fence until near the close of 1823, when the planting with honey locust of three-fourths of the distance on Pennsylvania Avenue was reported.

The above relates wholly to the smaller area covered by the first grant. How and when the added tract was enclosed is not shown by the records of the society. A more elaborate form of enclosure than a board fence or hedge began soon to be agitated, however, but being far beyond the means of the Institute relief could only be obtained through Congress. On the suggestion of Thomas Law, it was recommended on January 28, 1826, that Congress be petitioned to authorize the sale of public lots, and the use of the proceeds thereof in building a stone wall and iron railing around the ground and satisfying other needs of the society. The extent of this wall was placed at 2,925 feet, and its cost at $4,000. On April 21, 1832, an estimate for a brick enclosing wall having been submitted, the secretary was directed to communicate the same to the Committee on Public Buildings of the House of Representatives, and on December 15 similar action was again taken, but none of these requests met with favorable response, though the subject was brought before the House, possibly on more than one occasion, the last being on June 7, 1834, when an appropriation for the purpose was stricken out, as the existence of such a wall would be an obstacle toward the western extension of Capitol Square, which was already in contemplation.

Improvement and care of the ground.—When the Institute took possession of the ground it found two small frame houses built upon it by a Mr. Baily, who had obtained a ten years' lease from 1813 of a considerable tract of public land extending to Seventh Street, but a settlement of the owner's claims was soon effected.

On October 6, 1821, a committee recommended the laying out of two ponds, one formed by a large ditch encircling an island, the other in still lower ground, to be dug entirely out, which would serve for a fish pond and for many other purposes, both to be elliptical in shape. On December 1 of the same year it was reported that about half the ground had been ploughed. The committee on the garden was authorized, on June 7, 1823, to ascertain the practicability and advantage of conveying the water of Tiber Creek into the reservoir of the garden; and during October following walks were laid out and certain leveling of the grounds was done.

The first report of progress and of conditions was made to the society on December 6, 1823, and was in part as follows:

> The ground for the garden has been completely drained and partly leveled, and is in a great degree fit for cultivation. An elliptical pond has been formed 144 feet for the transverse and 100 feet for the conjugate diameter, with an island in the middle 114 feet by 85 feet. The canal that surrounds it is 15 feet

wide and 2½ feet deep. There is also a drain from the spring leading to the pond through the center of the ground, and from the pond to Tiber Creek, with a conduit at the lower side of the pond by which water can be either let into, or out of, the pond. At high water and a spring tide, 2½ feet of water flows into the pond, which can be there confined by putting a plug into the bore of the log; or the water can be nearly all let out and kept out. The island wants still to be leveled for cultivation, and the upper side of the pond to be deepened to produce a level.

Four walks have been laid out, one on Pennsylvania Avenue, one on Maryland Avenue, one opposite the circular road around the west side of the Capitol, and one in the center of the ground leading to the pond. The three walks on the side of the garden are 20 feet wide, with borders of 26 feet, in which to plant trees and shrubs; the center walk or road is 15 feet wide; the whole is well graveled. The commissioners appointed to drain and improve the public grounds on the south side of Pennsylvania Avenue have been very liberal in contributing to these improvements. They have given $100 in cash, and have done all the leveling and graveling, amounting to between $300 and $400 more.

From this time on there are frequent references in the minutes and other papers of the society to work done in the garden, leveling of ground, making beds, ploughing, draining, deepening of water in the pond, maintaining walks, etc., but no general description of the grounds. The Institute had very little money for any purpose, and but limited amounts could be expended in this connection, the only help received from outside appearing to have been that above recorded. In the latter part of 1825 and the beginning of 1826, the garden then having reached its larger size, special efforts were made for assistance. The commissioners for draining the low ground south of Pennsylvania Avenue were first appealed to to cause the garden to be drained, but their funds had been exhausted. Application was then made directly to Congress to authorize the sale of public lots for the benefit of the Institute, as described in another connection, a part of the fund so obtained to be used for bringing water from the eastern branch of Tiber Creek, first to a reservoir in Capitol Square, where it would be "a great security against the progress of fire in case of accident either in the Capitol or any of the adjacent buildings," or from which it might be carried into every room of the Capitol; and "after leaving the Capitol be thrown up in a beautiful *jet d'eau* of 30 feet in the Botanic Garden," and subsequently serve to water the garden, etc.

The wording of a complaint made to the Institute by the Commissioner of Public Buildings on June 9, 1827, relative to some of the work done at that period is now of much interest as bearing upon the question of maintaining an agreeable and symmetrical vista through the Mall from the Capitol. It also called attention to the fact that the location of the garden brought it under constant observation by Members of Congress, though this never gained the

society any pecuniary aid from that body. The Commissioner's letter was partly as follows:

The Botanic Garden belonging to your Institute is so directly in view from the Capitol, that I hope to be pardoned for a remark in relation to the improvement of it. The new section of the Washington Canal was laid out along a line drawn through the middle of the Capitol and of the Mall. The foot-way, canals & plantation in the garden do not coincide with this line, but diverge from it at an acute angle. This discrepancy is so glaring and so very offensive to the eye, that I am satisfied every person visiting the Capitol would be grateful for its removal.

I was gratified by the location of the Botanic Garden in its present site, from an expectation that it would become an ornamental appendage to the Capitol, and that under the eye of Congress they would be induced to foster it. But you are aware, Sir, that whether it shall become an ornament or deformity, depends materially upon the plan which shall be pursued in its improvement. I flatter myself therefore that this subject will be considered not unworthy the attention of your enlightened body.

The discrepancy was found to be much less serious than the Commissioner had intimated, and was soon corrected. On November 20 following the treasurer reported to the society that,

By means of the late expenditures on the Botanic Garden the following objects have been attained, viz.—The ground has been completely drained by drains extending between 400 and 500 yards in length, and in some places 3 feet deep; the canal has been deepened, so that it now surrounds the island, and is between 3 and 4 feet deep and about 18 feet wide, with a good foot bridge over it. Several new walks have been made and the whole well gravelled. The ground has been well ploughed and harrowed at least 3 times over. A tool house has been erected. The border on Maryland Avenue and the island have been properly prepared for the reception of seeds and plants. It is believed that it would be most beneficial, at the same time least expensive, to cultivate this border and the island, and to sow the remainder of the ground in the center with white clover, in the spring. And to effect these objects a gardener can be obtained for $60 per annum, who will not only preserve the garden, but will plant any seeds or plants that may be received, besides supplying trees where dead.

In a letter dated August 6, 1830, written in protest of a proposed leasing of the ground as a pleasure resort, in connection with which the objects of the Institute would continue to be carried out, William Elliot spoke of the condition of the garden at that time as follows:

It is urged that the garden remains uncultivated, and that we make no use of it. But even in its present uncultivated state, it is a not unpleasant object as seen from the Capitol; and certainly much more worthy the nation than a pleasure garden, with its usual scenes of debauchery. And why is the garden not cultivated, and the other proper objects of the Institute accomplished? Because we have no funds. Let those gentlemen who complain, first pay up their annual and other dues; and then see what can be done. No money has been laid out (of any amount) on the Botanic Garden for about 3 years. How then can we expect it to appear? However, with what has been laid out, the ground has been well drained; good gravel walks made; and more than

1,000 shrubs and trees planted; and in a thriving condition. No matter who has charge of the garden, it will require time for the trees and shrubs to grow.

S. L. Knapp (Ignatius Loyola Robertson), writing from Washington in 1830, had the following to say:

Congress has granted to this institution the use of several acres of land for a botanic garden and other purposes. By the liberality and exertions of some of its members this garden has been well laid out, and many of the trees and shrubs of other countries have been transplanted and nurtured there. This, with a little of that liberality that Congress has shown to other institutions or other projects, would flourish; for there are several literary and scientific men who would spend many of their leisure hours in the botanic department of the society if they could do it to advantage.

From the brief summary of local events and conditions prepared each year for the *National Intelligencer* by John Sessford the following are of interest in this connection:

1832. The Botanic Garden, on the west front (of the Capitol), from the temporary manner of its enclosure, is not kept in a good state—a continuance of the iron railing from its east end around it would give confidence to those who have embarked in the project by securing the safety of the plants and shrubbery, and adding beauty to the neighborhood.

1834. In and around the Capitol some handsome improvements have been made. The fountain is neat and ornamental, but too confined. The naval monument loses its effect from being so near the Capitol. Were it removed to the island in the Botanic Garden, properly elevated, with a sufficient sheet of water around it, it would be seen to more advantage. The surplus water from the fountain might also be taken there and jets formed.

The immediate care of the garden, in default of the requisite means, was subject to varied and never satisfactory arrangements. No one person was paid regularly on wages for more than a short period, and the wages ranged only from $5 to $21 a month. Temporary labor was often relied on, and for specific jobs, and it would appear from the records as though during a good part of the time no one was employed about the grounds. Mr. John Foy, the gardener of the Capitol grounds, rendered some assistance at times, more particularly in supervising work. One of the frame houses in the garden, up to the time of its removal in 1825, was a resource in this connection, though not continuously, occupants being found who would look out for the preservation and cultivation of the garden in consideration of the use of a small piece of ground for raising vegetables. In one case a rental of $75 was exacted of the tenant, but in another no charge was made for the house. The same services were secured in still another instance in return for the grass grown in the garden.

An unusual proposition made to the Institute in August, 1830, by one, Francis Barnes, was favorably considered by some of its most influential members but failed to be carried out, and it is doubtful if it could legally have been accepted. Mr. Barnes asked for a lease

of the garden for a term of years, and while he would be recompensed by charging admission fees to visitors, though members of the Institute would always be classed as guests, he did not state, except indirectly, what form of entertainment he had in mind. On the other hand, his proposal seemed most exceptionally favorable to the society, and was mainly as follows:

I will at my expense keep the garden in perfect order, pay all necessary attention to the plants already growing therein, cultivate all such seeds and plants as the Institute may provide, and, in short, do all in my power to promote the science of botany and fulfil to the strictest letter the objects of your incorporation.

I will at my expense repair the fences now standing or erect new and substantial fencing in their stead, lay the garden out in handsome and tasty style, erect arbours in various parts thereof, and set out vines of various kinds to afford shelter and cool retreats to such persons as may visit it, where refreshments may be obtained by the payment of a moderate compensation therefor.

I will erect an ornamental building in some part of the garden having therein a convenient room or place of meeting for the members of the society where they may congregate, free of expense and by calling therefor receive every accommodation, on such terms as cannot fail of being satisfactory.

As the garden will open to visitors at a small expense, a strict police will be established, to prevent the ingress of improper persons, to guard the plants, flowers, &c., from the depredations of such heedless or idle persons as might break or otherwise injure them.

At the expiration of the lease the buildings and improvements made at my expense will be given over to the Institute in perfect order and at all times during its continuance it will afford me pleasure to welcome the members of the Institute in the garden and to listen to any suggestion they may make for its further improvement.

In conclusion I beg leave to refer more particularly to the second article of this proposition and assure the members of the Institute that no pains will be spared to promote their views—to make the garden an ornament to the metropolis and the country at large and to afford to the members of the Institute (as guests) and to the respectable citizens of Washington and to strangers visiting the seat of government (at a small expense) a cool, comfortable, fashionable and respectable place of innocent recreation.

Planting.—The records of the Institute are entirely devoid of any descriptive account of the planting or of the growth of trees and shrubs in the garden, containing only occasional and brief references to this subject. Money was appropriated in small sums from time to time for procuring and planting forest trees and seeds of various kinds, and a few contributions from both domestic and foreign sources were also acknowledged. In August, 1822, a proposition by the commissioners for draining the low ground south of Pennsylvania Avenue to furnish and plant such trees as the Institute may require to ornament and beautify the garden was accepted. In December, 1823, native forest trees growing in the District of Columbia were collected and planted at the expense of John Quincy Adams to the amount of $25; and in 1826 several hundred cuttings of the white

mulberry were ordered purchased and planted. A list of the plants growing in the garden at about this time was prepared, but a copy of it has not been found.

Distribution of seeds.—Many gifts of seeds, both domestic and foreign, are mentioned in the records, and presumably portions of most, if not of all, of them were planted in the garden. Some of the lots received were extensive and some were evidently intended to be disposed of elsewhere than in Washington. The names of the plants represented are seldom given, but trees, shrubs and grains, more especially the latter, were included. Richard Rush, while Secretary of the Treasury, transmitted several important lots, evidently obtained through the consular service, coming mainly from Tangier and India, and including wheat, barley, the seeds and fruit of the date, and presumably other forms. In 1828 a general distribution on a basis similar to that subsequently followed by the Department of Agriculture was begun and continued for at least three or four years, possibly longer. On July 7 of that year the secretary reported that, in pursuance of the resolution of May 19, authorizing him to distribute at his discretion certain grains and seeds, he had immediately given notice in the city newspapers, in consequence of which numerous applications had been made by Members of Congress and others, and that nearly the whole of the grain and seeds had been distributed. The notice was as follows:

> The Columbian Institute has just received from Tangier, in Morocco, some wheat and barley, which it is supposed may form an useful addition to the stock of those grains already in the United States, particularly in the States and territories south and southwest of Washington. The Institute has also received some seeds and fruit of the date, which have been sent under a belief that they may be successfully cultivated in the most southern part of the Union. Tangier, whence these grains and seeds are brought, is in the latitude of 35 North; though black frosts are rare, white frosts are frequent there in January, February and March.
>
> Those members of Congress who may desire to obtain a portion of either or all of these objects will please make known their wishes to Mr. Dickins, the secretary of the Institute.—May, 1828.

Surrender of the Garden and enlargement of Capitol Square.—As elsewhere explained, the Institute reached a state of disintegration by the middle of the thirties, and while a few of its members made an earnest effort to continue its existence and to revive and strengthen interest in its projects, the botanic garden became almost wholly neglected. The hope of securing a building for the museum, library and meetings, however, persisted until the end, and the inclusion of the eastern part of the garden in Capitol Square in 1836 furnished opportunity for an appeal to Congress to reimburse the society to the extent of $1,500, the amount it had expended in connection with that section of the grounds. Though favorably reported upon by the

House Committee on Public Buildings, with a bill for the relief of the society, this measure did not pass, owing undoubtedly to the moribund condition of the Institute. Ceasing to exist as an active organization in 1837, the fact that it had established and maintained a botanic garden for nearly two decades seems almost immediately to have been forgotten, and the selection of the identical tract for the United States Botanic Garden thirteen years later would, therefore, appear, so far as shown by any of the records now available, to have had no relation to its former occupation by the Columbian Institute.

Capitol Square at the time of the founding of the Institute in 1816 was of limited extent, but soon after the rebuilding of the Capitol had been started, following the visit of the British troops, a beginning was made toward providing a park around that building. The improvements were carried on under appropriations granted from year to year. Excellent walks were constructed, trees, shrubbery and flowers were planted, and stretches of lawn were laid out, under the superintendence of John Foy, the first gardener, whose services were also occasionally availed of in the botanic garden of the Institute, and whose place, after his death in 1833, was taken by John Mayer. The adornment of the grounds at that time had already begun to attract attention, though the improvements had only in part been accomplished.

As early as January 21, 1829, Charles Bulfinch, architect of the Capitol, recommended to the House Committee on Public Buildings the improvement of the grounds directly west of the Capitol, including the site of the botanic garden, in the following words:

> The Capitol being now finished with the exception of these particular objects, I beg leave to suggest that the public grounds immediately adjacent should conform in some degree to the importance and high finish of the building. To bring them into such state, I propose that the triangular space between the Pennsylvania and Maryland avenues, and as far as Third street at the bend of the canal, should be permanently fenced in. This would secure the improvement of the ground, and render it practicable to form the foot walks on the avenues, one of which has not been brought into form, and the other is only paved of one-half the required width.

While regarding this work as necessary to the betterment of the public grounds in the immediate vicinity of the Capitol, and, as such, likely at some period to be sanctioned by Congress, the committee did not think it expedient to recommend it at that session.

In the House of Representatives on June 7, 1834, a bill making appropriations for the public buildings and grounds being under consideration, "Mr. Vinton moved to extend the square west of the Capitol to the foot of the slope, and to extend the botanic garden to the canal, but the motion did not succeed." In the same connection, Edward Everett proposed to amend the bill "by removing the naval

[Tripoli] monument from its present situation [on the west terrace] to the square east of the Capitol, but, on a suggestion of Mr. Watmough, modified the motion to remove it to the botanic garden; but after some desultory discussion, the motion was rejected." This monument remained on the west terrace of the Capitol until 1860, when it was removed to Annapolis, Md.

The "Act in addition to the act entitled 'An act making appropriations, in part, for the support of the Government for the year 1836, and for other purposes,'" approved July 4, 1836, contained the following provisions:

"For extending the Capitol Square, and improving the grounds within and adjacent to the same, as far west as the first street intersecting the Pennsylvania Avenue from the east, the sum of $25,000."

"For conveying the surplus water of the Capitol to botanic garden, making a basin, and purchasing a fountain of Hiram Powers, $5,000."

In his report to Congress of December 21, 1836, the Commissioner of Public Buildings, Maj. William Noland, stated that "The extension of the Capitol Square as far west as First street has engaged much of my attention, and, though the work has been retarded for the want of materials, the whole enclosure will be completed by the last of March." And also, "A part of the materials have been purchased for conveying the surplus water of the Capitol to the botanic garden, making a basin, and purchasing a fountain of Hiram Powers; but owing to the failure on the part of the contractor to comply with his contract, the work will not be finished before the month of May." It is doubtful from the wording both of the act and of the Commissioner's report where the basin and fountain were intended to be placed, though they seem clearly to have been associated with the garden. It is certain, however, that the site of the garden was never embellished by a fountain of Hiram Powers, and these improvements were evidently designed for Capitol Square.

The civil and diplomatic act for 1837 provided an additional appropriation of $40,000 for the enlargement and improvement of the Capitol grounds, in regard to which the Commissioner of Public Buildings reported on December 15 of that year that: "The extending of Capitol square to First Street west has been completed, so far as was contemplated by the appropriation of March last, with the exception of a part of the center footway, which has been left in an unfinished state for the want of materials, the contractor having failed to send on the requisite supply of flagging."

From a contemporary account published in 1837 or 1838, we learn that a stone wall surmounted by an iron railing had been built around Capitol Square, and a reservoir, with a *jet d'eau*, one of the early projects of the Institute, had been introduced. The two broad walks or approaches replacing Pennsylvania and Maryland Avenues

within the new area of the square were in course of construction, and the laying out of gardens and the planting of trees and flowers were well under way. John Sessford, writing for 1838, stated that

"The grounds west of the Capitol, under the direction of the Commissioner and superintendence of the public gardener, have been improved tastefully, and produce a fine effect. Connected with this should be enclosed the grounds west of First Street to Third Street for a botanic garden."[1]

Subsequent provisions by Government for the care of living plants.—Five or six years after the abandonment of the botanic garden of the Columbian Institute, the Government was called upon to provide for its own use like though not identical accommodations. The collections of the United States Exploring Expedition to the South Seas, 1838-1840, deposited at the Patent Office as received in Washington, included a large quantity of living plants and seeds. For a short period in the care of the National Institution, the Joint Committee of Congress on the Library, in July, 1843, appointed the Commissioner of Patents, Mr. Ellsworth, to the custodianship of all Government collections in that building, and, in August, placed Capt. Charles Wilkes in special charge of the gatherings of the Exploring Expedition. Mr. William D. Brackenridge, who had been the horticulturist and assistant botanist of the expedition, was retained in charge of the botanical specimens. In a report to Curator Charles Pickering of the National Institution, dated November, 1842, Mr. Brackenridge stated:

> The Institute has also come into possession of a collection of rare and highly interesting living plants, brought home also by the expedition, which has since received several additions in return for seeds distributed from the same source; also a few donations of other plants from various quarters. For their preservation a greenhouse, 50 feet long, and partitioned into two apartments, has been erected on the lot behind the Patent Office. The number of species in cultivation amounts to 500, and with duplicates of the same, there are about 1,100 plants in pots, over and above those now coming up from seeds. * * * The live plants brought home by the squadron amounted to 254 species.

This first greenhouse was constructed in 1842, presumably from the appropriation of $20,000 to the Naval Service for transporting to Washington, and arranging and preserving the collections made by the Exploring Expedition. Greenhouse construction was further continued on the same square during the two succeeding years, under the direction and control of the Library Committee. The civil and diplomatic appropriation act of March 3, 1843, contained an item of $1,200 for taking care of the botanical specimens brought home by the Exploring Expedition, and under this provision a second

[1] *National Intelligencer*, Jan. 4, 1839.

greenhouse was erected between September, 1843, and January, 1844. The corresponding act of June 17, 1844, with an item of $2,200 on account of the botanical collections of the same expedition, provided for "enlarging the greenhouse," but which of the houses was so enlarged is not stated. The accounts for material and labor continued from July 11 until October 31, 1844, and the size of the addition was given as 78 feet 7 inches long and the same width as the old parts. Mr. Brackenridge deplores, in his report for 1842, the lack of a place for outdoor planting, a desideratum which was evidently not supplied in that location. The other regular employees in the greenhouse service seem to have been a gardener or assistant florist and a laborer.

An extension of the Patent Office building, begun in 1849, made it necessary to displace the above greenhouses,[1] and they were transferred in 1850 to the site of the former botanic garden of the Columbian Institute on the Mall between First and Third Streets. Mr. Brackenridge continued in charge until 1853 or 1854, being also employed under A. J. Downing upon the improvement of public grounds in Washington during 1851 and 1852. The name of William R. Smith, who afterward became superintendent, first appears upon the pay rolls in June, 1853, as gardener or assistant florist, at the rate of $1.25 a day. The greenhouses in their new location remained, moreover, under the supervision of Capt. Wilkes, until August, 1854.

The removal of the greenhouses and the work upon the new site during the first year is thus described in the annual report of the Commissioner of Public Buildings for 1850:

> The square immediately west of the Capitol enclosure was selected by the Joint Committee on the Library as the most suitable for the location of the public green-house. The two small buildings on the Patent Office square have been, as was required by the appropriation contained in the deficiency bill, approved May 15, 1850, removed, and by the use of such of the materials as were suitable, reconstructed. And, to afford ample room for the care and preservation of the botanical collection, in addition to these, a more commodious building has been erected, which is so planned and located as to form a

[1] "In order to make room for the foundation of the eastern wing [of the Patent Office], it became necessary to remove a part of the conservatory, in which is kept the rich collection of tropical plants that were selected and preserved with so much skill and care by Captain Wilkes and the scientific gentlemen who accompanied him on the exploring expedition. The appropriation which could be applied to that object being insufficient to erect a new building adapted to the purpose of their permanent preservation, it was thought best to remove that part of the structure which interfered with the foundation of the Patent Office, and rebuild it in a cheap manner, so as to preserve the plants until Congress might fix upon a spot on which a permanent building should be constructed, and select adjacent grounds for the cultivation of the hardier plants of the collection." (Annual Report, Secretary of the Interior, Dec. 3, 1849.)

wing to some more elevated and handsome structure. Although these buildings may answer their purpose, the site upon which they are located will require very extensive improvements, in consequence of being so low as to occasionally subject it to an overflow from the tide-water of the canal, and some parts never free from standing water.

To remove this evil, and render the grounds eligible for the purpose to which they have been assigned, would require the surface to be raised and so formed as to insure a good surface drainage at all times: by this, and walling in the Tiber stream from the Pennsylvania avenue culvert to the canal, this lot of ground would present an entirely different aspect, and, I have no doubt, would be well adapted to the more ornamental features which the artistic skill of the gardener may design for it.

The cost for materials, labor, &c., so far incurred, has unavoidably exceeded the appropriation about twelve or thirteen hundred dollars, which sum will be further increased by the subsequent payment of several claims which will be due to persons who have not yet entirely completed their engagements for the performance of certain portions of the work.

The location and style of execution of these erections have been conformable to a plan approved by the Joint Committee on the Library. This plan contemplates a more elevated and ornamental structure, of which the present central building, as before stated, is designed as the eastern wing.

In his report for 1851 the Commissioner said with reference to the improvement of the grounds west of the Capitol that the work done consisted

In taking up and resetting two hundred feet of curb and pavement on the south side of Pennsylvania avenue; trimming and gravelling the east front of the botanic garden, and removing and replacing the fence on the south side of the same; filling earth on the garden square, when it has been offered at a low price; and filling in a triangular space on the south side of Maryland avenue east of the canal. There yet remains of the appropriation for these objects $229.31, unexpended.

No appropriation has been made for the last two years for the improvement of the botanic garden square. I have now presented estimates for some additional buildings for the plants, and for filling up, draining and laying out the square in a suitable manner. The sum asked is all that will be necessary for the improvement of this ground until it shall be the pleasure of Congress to enclose it with an iron fence.

From the same report it appears that a part of reservation No. 17, "lying on the west side of New Jersey avenue has been selected as the site of the public nursery. It has been suitably enclosed and a stream of water conducted to it, by permission of the heirs of the late Daniel Carroll of Duddington, from a spring on their mansion grounds. This square of ground is now ready for the use for which it was enclosed." The site of this public nursery or propagating garden seems to have been changed in 1857 to a small triangular reservation between Third Street and Four and One-Half Street and Missouri Avenue and the canal, close beside the Botanic Garden.

In a report to the Commissioner in 1853, W. D. Brackenridge stated,

The idea you suggested to me some time ago, of asking for an appropriation to fill up the low square on which the public greenhouse is situated, is an

improvement which, if you succeed, would redound much to your credit, as it is one of the most unhealthy sinks in our city—so much so that the men employed at the greenhouses are more or less sick with chills and fevers during the most part of the year.

The following remarks on the garden are from the introduction to "A catalogue of plants in the National Conservatories," prepared by William R. Smith in 1854:[1]

I would here state that the majority of the plants in this list are the results of the United States Exploring Expedition, commanded by Captain Wilkes, with several additions by other officers of the navy and army. Mr. Brackenridge, by a judicious system of exchanging, has obtained many important additions. Several of the plants first discovered by the expedition are now to be found wherever an exotic collection exists; as an example, I may cite the beautiful Gloxinea rubra, &c. This system of exchanging should be further extended. The indigenous plants of this country could be readily exchanged for useful plants from other countries.

The conservatories are situated in the square immediately in front of the Capitol, west side. * * * A systematical natural arrangement of indigenous, medical, and other useful hardy plants could be formed in it, which would be of great benefit to the collegiate institutions of the District, and would assist in making Washington, with its libraries and museums, what might be called the City of Reference.

The Exploring Expedition greenhouses removed from the Patent Office have been located here about four years.

I may here state that the seeds from the collection are gathered, and, together with such plants as can be spared, are distributed to the order of the chairman of the Joint Library Committee, the Hon. J. A. Pearce, Senator from Maryland, and Captain Wilkes; exchanges being managed by the superintendent.

In 1859 the garden was spoken of as a pleasant place to visit, with gravel walks, bordered with box, rare plants and trees. The cultivation of plants had, therefore, by that time been extended beyond the greenhouses, and the later aspects of the site as a botanical garden, as contemplated by the Columbian Institute and on the same ground which it had occupied, had been started.

MUSEUM.

The formation of a cabinet of minerals and a museum of miscellaneous articles was among the objects early announced by the Institute. While many specimens in zoology, botany, archeology and various other subjects were assembled, the minerals remained the dominant feature, received the greatest amount of attention and were evidently regarded as the most important asset of the society next after the botanical garden.

[1] A popular catalogue of the extraordinary curiosities in the National Institute, arranged in the building belonging to the Patent Office, by Alfred Hunter, 1854 and 1855, pp. 64–70.

The number of contributions to the museum mentioned in the minutes was 60, but it is certain that there were others which failed to be recorded. The accessions were apparently all donations and ranged in extent from a single specimen to a "box" or "collection," but the entries seldom gave the localities where the material was obtained or more than a brief reference to its character. No catalogue has been found, nor has any information been obtained to show the size and value of the collection. It is doubtful if visitors generally had access to it unless in the company of members, as an attendant was only employed to be present at meetings. There is, moreover, no record of scientific researches of any kind in connection with the museum, unless the naming of minerals may be so classed.

It is of interest to note that in 1821 serious consideration was given by the Institute to the purchase of the celebrated Charles Willson Peale Museum in Philadelphia, which was then offered for sale to the United States for $100,000. Three methods for raising that amount were proposed in a resolution, namely, an appropriation by Congress, a lottery to be held by the Institute under authority of Congress, and the soliciting of contributions from the public at large at the rate of one dollar a person, but it is needless to say that nothing came of the matter.

Minerals.—Included with the minerals were ores and rocks, and some building stones. Among the acquisitions from abroad were a collection of Italian minerals from Dr. Hall, of Leghorn, various specimens of lavas and other minerals from Mount Aetna, and silver ore from Peru. One of the most important accessions was a collection of minerals that had belonged to Mr. Rudolph Schaer, principal of a school and a member of the Institute, which was purchased and presented by Dr. Cutbush.

On June 3, 1823, a committee reported that it had arranged the minerals according to their classes, but for want of convenience in the room had been unable to make a more minute division. During October, 1825, cases were built at a cost of $90, and the arrangement of the specimens in the room at the Capitol of which the Institute had recently taken possession was directed by a committee. In the spring of 1826 the Schaer collection was installed. During 1835 and 1836 the minerals were the subject of much more extended and precise attention than at any previous period, Dr. F. Hall having been employed to label and arrange the specimens, and being thanked by the society for the highly satisfactory manner in which this had been done. Duplicate specimens to the number of 339, segregated in the course of this work, were sold for $30.33. William Cranch, jr., assisted Dr. Hall and prepared a list of the collection.

Herbarium.—The formation of a collection of dried plants is nowhere specifically mentioned in its early records as one of the

objects of the Institute. This may readily account for the organization in March, 1817, of the Washington Botanical Society,[1] at least one-half of whose members were also members of the Institute. A proposition to merge the smaller with the larger association was brought up in October, 1817, but it failed of consummation, and the Botanical Society continued its existence until 1826, when its library was ordered deposited in the Washington Library and its herbarium was placed in charge of Dr. McWilliams, then the president of the society. The Botanical Society received a suggestion in 1817 looking to the founding of a botanical garden, but it obtained no consideration. One of its definite projects, however, was the beginning of a national herbarium, which the Institute also later professed. The Institute did, in fact, receive specimens of plants collected in the District and elsewhere, and also a few examples of economic plant products, but how extensive this collection became there is no way of judging.

Dr. William Darlington, of West Chester, Pa., a valued adviser in all matters of which he had knowledge, a corresponding member of the Institute, and at that time a Representative in Congress, addressed the Institute through its secretary on December 14, 1819, on the subject of a national herbarium, in the following letter:

I had intended, at my leisure, to have submitted at some length to the Columbian Institute my ideas respecting the importance of attempting to collect a National Herbarium, comprising specimens of all the native and naturalized plants of our country. But perceiving by the newspapers that an adjourned meeting is to be held this evening, and not knowing when the Institute may again assemble, I beg leave through you, in this hasty manner, merely to suggest the subject for the consideration of that body. I cannot doubt but those members especially who have a taste for botanical science will admit both the feasibility and the importance of the proposition. If a botanical committee were directed to organize a plan and to solicit specimens, accompanied with notes of the place of growth, time of flowering, &c., from the cultivators of botany in the different parts of the United States and their Territories, there is no question with me but we might, in a very short time, have a respectable and valuable collection of our indigenous and naturalized vegetables. They might easily be arranged and labeled, either according to the sexual system of classification, or after the manner of Jussieu—so that any plant in the collection could be found at pleasure. In my herbarium, containing nearly 1,000 species, I can lay my hand on any specimen which may be desired in half a minute. It would be extremely gratifying to the cultivators of natural science, to be able, when they arrive at the seat of the general government, to see and examine the vegetable productions of our extensive and diversified soil. Should these suggestions meet the approbation of the Institute, and that body should think proper to undertake the formation of an American herbarium in this city, I would cheerfully contribute specimens of the plants growing in the vicinity of my residence (West Chester, Penna.). And I should suppose persons could be found in every district of our country who would freely undertake to do the

[1] A brief account of this society is given in the appendix.

same of their respective neighborhoods. I flatter myself the motive of these few hasty observations will secure for them the indulgence which they need, for their manner, owing to the circumstances under which they are written.

In his reply, dated December 16, the secretary of the Institute said, "The subject to which your letter relates is one that the Institute has very much at heart, and the collection which you propose, as well as an extensive botanic garden, are among the establishments which enter into its plans." On March 10, 1820, Dr. Darlington was thanked for a contribution of American plants, while on January 14, 1826, Dr. Alexander McWilliams presented a series of plants of the District of Columbia, about which he wrote as follows:

I present to the Columbian Institute a herbarium of the plants of the District of Columbia, which I have collected and arranged according to the Linnean improved classification. That it is deficient in many of the plants found in this district will be obvious to every one, yet this defect I hope to remedy the ensuing summer. There are other and more important defects I much fear which I hope the more experienced botanist will pardon and correct. It is presented with a wish that it may be the commencement of a National Herbarium, here to be deposited, where the inquirer may peruse and examine at leisure all the vegetable productions of our extensive country.

Miscellaneous.—Of zoological specimens there was a small and miscellaneous assortment, evidently mostly marine and including a quantity of shells from Florida, while of fossils there were a few from various localities. Ethnology was represented by articles of dress, implements and various other objects from the western United States, the northwest coast, the Pacific islands, China and Africa, and there were over two hundred coins, about one-half of which were ancient, from the near East. We also find mention in the records of some articles of an industrial character, such as a specimen of morocco leather and a model of a Chinese fishing stage.

In archeology the Institute possessed a small but valuable collection of art objects, which were said to have come mainly from Greece and Pompeii. The entries in the minutes of the Institute, which are undoubtedly very incomplete, are as follows: May 6, 1826, 5 marble tablets, with inscriptions, from Pompeii, gift of Walter Jones; December 15, 1828, various fragments of marbles from celebrated ruins in Greece, gift of Thomas W. Brent; March 7, 1831, two white marble statues, Flora and Ceres, gift of Mr. Roux de Rochelle; June 6, 1831, some interesting objects of art from the same donor. Speaking of the museum of the National Institution in his Washington guide for 1842, George Watterston states "Some fine pieces of statuary, formerly belonging to the Columbian Institute, also grace the hall." Alfred Hunter, in his catalogue of the collection of the National Institute, 1854, 1855, describes, among other archeological objects, a bust of Ceres and another of Bacchus, which the account leads one to suppose is, in fact, the Flora of the

Columbian Institute, where it had presumably been wrongly identified.

Most interesting, however, in the museum of the Columbian Institute, was a "suit of regimentals worn by Washington as commander in chief of the army during the Revolutionary War," presented by Thomas Law on May 5, 1828. A special case for it, costing $19, was constructed in January, 1836. There are many references to this suit in connection with the National Institute. David Cooke, writing to his wife in 1842, after visiting the Patent Office, stated that "The dress Gen. Washington had on when he resigned his commission to Congress at Annapolis, in 1783, is here in a glass case just as it then was—a pin substituted for a lost button." According to Hunter's catalogue, "This [case 24] is the most interesting case in the whole collection, and viewed by visitors with the utmost satisfaction. It contains the coat worn by Washington when he resigned his commission at Annapolis. Buff cassimere vest and breeches. This is the same suit in which Trumbull's picture in the Capitol represents Washington to be attired." It is evident, however, on a comparison of the suit of clothes with the figure in the painting that Trumbull did not adhere strictly to the original.

Disposition of the museum.—As elsewhere explained, in 1841, some four years after its active operations had ceased, the collections and library of the Columbian Institute were turned over to the National Institution. No complete list of the material has been discovered, and in the minutes of the National Institution the transfer mentions simply "the books, minerals and works of art belonging to the late Columbian Institute." The specimens were incorporated in the private collections of the Institution, which, in accordance with the terms of its charter from Congress, became the property of the Government in 1862, and were thereupon transferred to the Smithsonian Institution. It is now impossible to specifically identify any of the natural history specimens which came from the Columbian Institute, but objects in other groups are still readily distinguishable, and directly connect the collections of the National Museum with those of the Institute, indicating that the latter organization is to be regarded as having started the nucleus of the present national collections.

The archeological objects of the Columbian Institute are probably all now in the National Museum. The Ceres is not a statue or bust, as mentioned above, but consists only of the head and neck, and the same is true of the Bacchus. Among the remaining marbles, which have for many years remained grouped together, though it would not be safe to assume that all came from the Columbian Institute, there are two complete small statues, three busts, two hands, and several torsos. The suit of Washington, which has long been one of

the most prominent objects exhibited in the National Museum, may be described as a Continental uniform of dark blue coat with buff facings, and waistcoat and knee breeches of buff cloth. That it is the identical suit worn on the occasion when Washington surrendered his commission in the Army was not claimed by the donor, Thomas Law, a member of the Washington family.

Soliciting of specimens.—Active measures were taken by the Institute for obtaining specimens for the museum and botanic garden, and no channel which promised gratuitous contributions was neglected. In March, 1826, a committee waited on the heads of the Federal departments in Washington and requested them to solicit of their correspondents all objects of natural history that they might deem interesting. The following letter, addressed to the officers of the Medical Department of the Army by Surg. Gen. Joseph Lovell on April 29, 1826, shows how cordially this request was complied with:

SIR: I am directed by the Secretary of War to state that, on the application of a committee of the Columbian Institute, you are requested to forward through this office specimens of seeds, plants, minerals, fossils, or whatever may be deemed useful and interesting, for preservation in the cabinet of said institution; and also to transmit such remarks relative to the habits, localities and history of the several specimens as may be thought necessary to a scientific classification of them.

Under date of October 1, 1827, a circular of instructions for collecting and preserving animal, vegetable and mineral specimens, "derived from the most approved sources," prepared by Dr. Alex. McWilliams and Rev. James M. Staughton, was issued, being printed on three pages of foolscap size. It gave information respecting the objects of, and the contributions desired by, the Institute, and covered the subjects of minerals, plants and seeds, insects, shells, fishes, birds and quadrupeds. Copies of this circular were transmitted to many individuals, and to each Senator and Representative in Congress, with a request that, if the design were approved, they be forwarded to such gentlemen in each State or district as would be likely to promote it; and also by the Secretary of State to each of the diplomatic and commercial agents of the United States abroad, by the Secretary of the Treasury to each custom house and land office, by the Secretary of War to each military post or station, by the Secretary of the Navy to each ship in commission, and by the Postmaster General to various post offices in different parts of the Union.

Other early collections in Washington.—C. Boyle, a painter from Baltimore, who made use of the studio on Pennsylvania Avenue near Sixth Street which had been occupied by Gilbert Stuart from 1803 to 1805, is said to have assembled there a small museum of natural history, but no more than the fact of its existence has come down to us. It was mentioned in the *National Intelligencer* for March 7, 1811, and by Warden in 1816, the latter also referring to a small col-

lection of objects of natural history belonging to Mr. Villard, superintendent of the military depot at Greenleaf's Point.

In "Historical Sketches of The Ten Miles Square forming the District of Columbia," by Jonathan Elliott, published in 1830, there is a brief account of the collections then being assembled in the War Department, from which the following is abstracted:

Attached to the War Department, is the office of Indian Affairs, with the duties of which Col. McKenney is charged. This office possesses much interest, perhaps more than any other in the Government. In it are arrayed, in tasteful order, the likenesses of one hundred and thirty Indian chiefs, in their native costume. These likenesses having been taken from life (with a few exceptions) by King, of this city, are not only fine specimens of the art, but in point of exact delineation, and spirited, and close resemblance to the originals, they are perfect. * * * Care has also been taken to preserve the costume of each tribe. Nineteen tribes are represented, viz: Chippewas (or Ojibwa), Sioux, Menomines, Winnebago, Saux, Fox, Oto, Panes, Maha, Kansas, Senecca, Shawnese, Delaware, Creek (or Muscogee), Cherokee, Choctaw, Seminole and Uchee. These paintings are on wood (except the full lengths, of which there are five), in gilt frames, 18 inches by 14, in size.

Besides these likenesses, there are various collections made by Col. McKenney in his travels over a vast extent of the northwest and among our southern and western Indians, consisting of Indian dresses, ornaments, petrefactions, minerals, &c., &c., all suited to a place of this sort, where, long after the original owners of this country shall have mingled with the dust of their mountains, the curious will delight to repair, to study the appearance of the native owners of this continent.

An anonymous correspondent of the *Boston Atlas*, whose letters were reprinted in the *National Intelligencer* for April 27, 1838, after a visit to Georgetown College, then about 50 years old, stated that "Attached to the college is a small but interesting museum and cabinet of minerals, natural history, etc." Later, at the Department of War, he explained that,

The first object which strikes one on entering the corridor of the Secretary's apartments is the extensive collection of portraits of the chiefs, warriors and squaws of the various aboriginal tribes who have visited the seat of Government for the last 15 or 20 years. This gallery was commenced by Mr. Calhoun, when he was Secretary of War. * * *

I crossed to the Topographical Bureau, to pay a passing visit to the worthy and able head of that department, Col. Abert, * * * and rambled into the contiguous geological apartments, to take a glance at the extensive cabinet of minerals and fossils which belongs to the gentleman who is at the head of this branch of the Topographical Bureau. Him, too, I found busy in the midst of specimens of earths, ores, stones, shells, coals and other minerals, representing every element in nature, and every age of the world—of every region of our own continent, and almost every country of Europe. * * *

Amongst the interesting collections of natural history of our country, unnoticed and almost unknown, but which has been quietly growing in value by the rarity, variety and richness of its specimens, is this national cabinet of the metals, minerals and shells of this continent. This has been founded by Mr. Featherstonhaugh, the Government geologist, whose adventurous journeys

to our very confines enable him to collect the rarest objects, which during the winter months he arranges in the rooms devoted to that purpose, at the Topographical Bureau, Department of War. I had not the slightest idea of the extent of the labors of this gentleman, or the great object he has in view. My surprise, therefore, was great on going into his rooms to find so magnificent a collection of metals, minerals, shells and Indian relics, neatly arranged, each with its own label, giving the name and locality, and the walls covered with maps, geological sections, &c. What enhances the merit of all this is, that it has entirely sprung from his own industry and perseverance; he having collected, classified and labeled every specimen in the collection, without clerk or assistant of any kind.

* * * * * * *

His examinations of the gold regions of the United States are not yet completed, but his cabinet, which seems to me an excellent foundation for a national cabinet, and, in fact, which I should think destined, in time, to grow into something like that great national establishment, the British Museum, has already attained dimensions altogether incompatible with obscurity, and will, probably, lead, ere long, to its being brought forward as a public affair.

* * * * * * *

If any one department of it pleased me more than any other, it was a collection of minerals from all parts of the world, principally of crystals, beautifully arranged, with descriptive labels. How many thousand specimens, including an immense number of rich gold ores, and lumps of native gold, and gold dust from the various mines of this country, are in the collection, I omitted to inquire. Here I saw the only crystals of tin which have been found in the United States, also some diamonds. Of fossils there is a great quantity, certainly of the most curious forms, and such as I had never conceived an idea of. Of the rarest European fossils there is a singularly fine collection, made, as I understand, by Mr. F. when in Europe. The fresh water shells, from the sources of the St. Peter's and other northwestern rivers, are of indescribable beauty.

This chapter would not be complete without a reference to the private collection of John Varden, begun by him in 1829 and opened to the public as the Washington Museum in 1836 at the corner of John Marshall Place and D Street. It consisted of a great diversity of objects, natural history, art and veritable curios. In a letter dated June 24, 1836, Varden expressed his willingness to take charge of and care for the collections of the Columbian Institute, and otherwise solicited contributions. Later his collection was absorbed in the museum of the National Institution, and several of the objects are now distinguishable in the collections of the National Museum. Varden was also employed by the National Institute and subsequently by the Smithsonian Institution, remaining in the service of the latter until his death in 1865.

LIBRARY.

The importance of an adequate and comprehensive library was recognized and was the subject of frequent discussion and several resolutions. The minutes record 49 donations of books and pamphlets, relating to very diverse subjects, but only one purchase and

one subscription to several periodicals. No catalogue of the library has been found. The resolutions had reference mainly to the raising of funds, and recommendations were submitted that a certain percentage of the fees of members be applied to library purposes, but no practicable solution of the question was ever reached. The subjects of botany and agriculture appear to have been most strongly urged, though the general classification adopted comprehended (1) current periodical publications on scientific and literary subjects, (2) standard philosophical works, (3) rare and useful works on antiquity, research, etc., and (4) general utility on all subjects. The library was among the property of the Institute transferred to the National Institution in 1841.

On January 15, 1827, the library committee was instructed to inquire into the expediency of making a donation out of the funds of the Institute to Prof. Silliman to aid him in the support of his valuable work, *The American Journal of Science*.

MISCELLANEOUS.

AMERICAN PHARMACOPŒIA.

Under date of March 4, 1818, the Columbian Institute was invited by a committee of the Medical Society of the State of New York to aid in promoting the design for the formation of an American or National Pharmacopœia and individual contributions were solicited for the contemplated work. It was proposed to hold a general convention in Washington in January, 1820, for the purpose of compiling such a Pharmacopœia, after the materials had been gathered in four districts, namely, the northern, middle, southern and western States. There is no record of formal action by the Institute, but in view of the large medical representation in its membership, including several who were well versed in botany, it is very probable that at least valuable individual assistance was rendered.

MERIDIAN OF WASHINGTON, NATIONAL OBSERVATORY AND WEIGHTS AND MEASURES.

Through two of its members, William Lambert and William Elliot, the Columbian Institute was brought into relations with the important matters of determining the longitude of Washington and establishing a national observatory. These projects were the subject of several communications, of discussion and of a resolution, in which the question of fixing a standard of weights and measures was also incorporated. The following is from *The Washington Guide*, by William Elliot, editions of 1822 and 1826:

In pursuance of a joint resolution of both Houses of Congress, of the 3d of March, 1821, the President authorized William Lambert to take such measures

as were thought best, for determining the longitude of the Capitol from Greenwich, or some other known meridian in Europe. Mr. Lambert appointed Mr. Elliot of this place to take the observations; which he did, by means of a transit instrument,—a well regulated clock, and meridional line extended about a mile and a quarter, on which was placed a board, with a circle and line passing through the centre, by which the transit instrument could be correctly adjusted. The result from the mean of 24 transit observations of the moon over the meridian (the clock having been regulated by alternate observations on the sun and certain fixed stars) was the determination of the longitude from Greenwich to be ——. Nothing now remains to confirm the results of these observations but building an observatory here, and having corresponding observations made in Europe.

Nothing, perhaps, would so effectually accomplish the object of fixing the first meridian at Washington, as the erection of an observatory, supplied with suitable instruments, from which corresponding observations with other places could be made; and Washington would, of course, be considered the first meridian for America.

William Lambert, who was an Englishman by birth and who memorialized Congress as early as 1809 on the subject of determining the meridian of Washington, was a clerk in the Pension Office. In another connection reference will be found to his numerous astronomical and mathematical papers submitted to the Institute. In his Chorographical and Statistical Description of the District of Columbia, published in 1816, David B. Warden says,

In 1809, Mr. Lambert presented a memorial to the House of Representatives on the establishment of a first meridian for the United States at the city of Washington. The year following, this memorial was submitted to a select committee of Congress, of which Dr. Mitchill was chairman, who recommended that provision should be made by law for determining, with the greatest accuracy, the distance between the city of Washington and Greenwich in England, and that proper instruments should be procured. This committee observed, "that situated as we are in this western hemisphere, more than three thousand miles from any fixed or known meridian, it would be proper, in a national point of view, to establish a first meridian for ourselves; and that measures should be taken for the eventual establishment of such a meridian in the United States; that no place perhaps is more proper than the seat of government." This subject was referred to the Secretary of State, who, in a report, addressed to the House of Representatives in July, 1812, strongly recommended the establishment of a first meridian, and an observatory, at Washington; "that the former has become, by the usage of nations, an appendage, if not an attribute, of sovereignty."

William Elliot, also from England, was a teacher of mathematics, and for some years a clerk in the Patent Office. Of diversified talents and interests, he was the founder of the *Washington City Gazette* in 1813, the publisher of Washington guide books, and from 1832 to 1837, city surveyor. He was a charter member of the Botanical Society of Washington, a writer on plants, and, as stated by the *National Intelligencer* of January 1, 1838, in the announcement of his death and burial, "He was one of the earliest and most zealous mem-

bers of the Columbian Institute, and his remains were attended to the grave by that society." He built a small observatory at the rear of his residence on North Capitol Street, where his astronomical observations were conducted.

An important paper "On the erection of a national observatory, on publishing an astronomical ephemeris, and on the formation of a board for the promotion of nautical astronomy and geography" was read before the Institute by William Elliot on December 31, 1825. Two years later Mr. Lambert presented a communication on the establishment of a national observatory at the seat of government of the United States, which resulted in the following report and resolution, submitted to the Institute on December 31, 1827:

The Columbian Institute for the promotion of arts and sciences, having considered the reports made to the President of the United States, on the 8th November, 1821, and 1st December, 1823, by William Lambert, one of the resident members of this Institute, relative to a determination of the longitude from Greenwich and Paris observatories, of the Capitol in the City of Washington; and entertaining no doubt of the accuracy of the results found according to the data on which the calculations have been made (they having been sufficiently proved by the last mentioned report), cannot but feel a lively interest in the completion of an object which not only regards the advancement of an useful branch of science, but is essentially connected with the independence and sovereignty of the United States. The erection of a National Observatory at the seat of the general government and furnishing it with suitable instruments is, in the opinion of the Institute, worthy of the attention of Congress;—at which we might observe and compute for ourselves the right ascensions, declinations, longitudes and latitudes of the moon and such stars or planets as are most suitable for geographical and nautical pursuits, and enable us to prepare and publish an Astronomical Ephemeris, independent of the aid of European calculations. If a general or universal meridian could be agreed upon, from which all nations might reckon their longitude, there would not be so much advantage in the establishment of a National Observatory in the United States; but the kingdoms and states of Europe have not, and, probably, never will consent to resort to any other meridian than that which is situated within the limits of their own territories, respectively. This object is, therefore, such as demands the consideration of all classes of our community; and the expense attending the institution would, it is confidently believed, be amply repaid by the benefits resulting from it.

Another object yet undecided upon by the National Legislature also claims the attention of the Columbian Institute, viz., the establishment and regulation of weights and measures. Interesting and learned reports have been made thereon by Mr. Jefferson and Mr. Adams, now President of the United States, while acting in the capacity of Secretary of State; but, until Congress shall agree to fix a standard, we are and must be dependent on a foreign nation for the capacity of its measures, and the specific gravity and denomination of its weights. Under these impressions, the following resolution has been proposed, viz:

Resolved, that the Columbian Institute regard the establishment of a first meridian and of a national observatory at the seat of the general government, also the fixing an uniform standard of weights and measures for the United States, as objects of importance to the American community; and that the

members of this Institute will, collectively and individually, use such influence as they may possess to further the progress and completion of the same.

UNITED STATES EXPLORING EXPEDITION.

A letter from the Secretary of the Navy, Samuel L. Southard, an earnest and active member of the Institute, read on October 6, 1828, announced recent action by Congress directing an exploring expedition to the southern Pacific, the preparations for which were in progress, and as it was important to the cause of science that well qualified men, with proper instructions, should accompany the expedition, requested that the Columbian Institute would communicate any suggestions or views, either as to the proper persons to be sent, the subjects of scientific inquiry, the instruments necessary, or the modes of investigation. Being sensible of the honor intended by so flattering a mark of the confidence of the Government, the preparation of such plans, recommendations or suggestions as might be necessary for the purpose was immediately confided to a committee composed of Samuel L. Knapp, Dr. Walter Jones, Dr. Bailey Washington, U. S. Navy, and Mr. William Elliot, which the following corresponding members, namely, Representative Edward Everett, Senator Mahlon Dickerson, Mr. F. R. Hassler, Prof. Parker Cleaveland and Prof. Benjamin Silliman were subsequently requested to assist.

At least two reports made by this committee, and possibly more, approved by the society, were transmitted to the Secretary of the Navy, but no copies or even abstracts of these have been found with the papers of the Institute and their character has not been ascertained, except that F. Bailey's method of laying down a meridional line was recommended and also one appointment, but only for a minor position. The last reference to the subject in the minutes was of date April 6, 1829, and it is interesting to note that the commander of the expedition, Lieut. Charles Wilkes, became a member of the Institute in 1833, five years before the vessels sailed.

APPENDIX.

CONSTITUTION OF THE COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS AND SCIENCES.

(Adopted August 8, 1816.)

SECTION I.

Art. 1. The association shall be denominated the "Columbian Institute for the promotion of Arts and Sciences"; and shall be composed of resident and honorary members.

Art. 2. The objects of the Institute shall be to collect, cultivate and distribute the various vegetable productions of this and other countries, whether medicinal, esculent, or for the promotion of arts and manufactures.

Art. 3. To collect and examine the various mineral productions and natural curiosities of the United States, and give publicity to every discovery which they may have been enabled to make.

Art. 4. To obtain information respecting the mineral waters of the United States, their locality, analysis and utility; together with such topographical remarks as may aid valetudinarians.

Art. 5. To invite communications on agricultural subjects, on the management of stock, their diseases and the remedies.

Art. 6. To form a topographical and statistical history of the different districts of the United States, noticing particularly the number and extent of streams, how far navigable; agricultural products, the imports and exports; the value of lands; the climate, the state of the thermometer and barometer; the diseases which prevail during the different seasons; the state of the arts and manufactures; and any other information which may be deemed of general utility.

Art. 7. To publish annually, or whenever the Institute shall have become possessed of a sufficient stock of important information, such communications as may be of public utility; and to give the earliest information, in the public papers, of all discoveries that may have been made by or communicated to the Institute.

SECTION II.

Art. 1. The President of the United States, for the time being, shall, with his permission, be considered the Patron of the Columbian Institute.

Art. 2. The officers for managing the general concerns of the Institute shall consist of a President, four Vice Presidents, one Secretary, one Treasurer, and four Curators.

Art. 3. There shall be a General Committee of fourteen members elected annually, by ballot, on the stated meeting held on the first Monday of October, to be chosen from the resident members, and styled the General Committee, and the officers of the Institute shall, ex officio, be members thereof. This committee, as soon as convenient after the election, shall assemble and elect

by ballot a chairman and secretary from their body; the remaining twelve members, exclusive of their officers, shall be formed into four departments, or subcommittees, each composed of three members, agreeably to the nomination of their chairman, viz:

No. 1.—Corresponding Committee.

The duty of this committee shall be to correspond with naturalists, or other persons, in the different sections of the United States, to solicit and receive all specimens and communications embraced in the objects of this Institute; also to correspond with the amateurs of botany, natural history, agriculture, &c. of other countries; and, unless otherwise ordered by the Institute, to conduct all correspondence.

No. 2.—Committee on Mineralogy.

To this committee shall be submitted all questions, communications, and specimens of every kind, embraced in the 3d Article of the 1st Section of the constitution, and when they shall have examined the same, they shall report the result of their examination to the chairman of the General Committee.

No. 3.—Committee on Botany and Agriculture.

To this committee shall be submitted the execution of the 2d Article of the 1st Section of this constitution, and they shall arrange and deliver over to the Curators such specimens as will not admit of cultivation. This committee shall likewise be charged with the superintendence of the Botanical Garden, and shall report to the General Committee the progress and state of the establishment.

No. 4.—Committee on General Subjects.

To this committee shall be submitted all communications which may be received, connected with the 4th, 5th, and 6th articles of the 1st Section of this constitution. This committee shall report to the General Committee on all communications which are embraced in any or all of the aforesaid articles, and shall endorse those which, in their opinion, are most worthy of publication; they shall then be delivered to the Curators for preservation.

Art. 4. The General Committee shall have power to direct the application of the funds of the Institute to such purposes as they may deem proper, according to their discretion, in all cases, where a fund, by the condition of the donation, is not appropriated to a particular purpose; and the said committee shall be empowered to do all acts that will promote the general interests of the Institute, and they shall establish such rules and regulations for the preservation of order and transaction of their business, as they may deem proper.

Art. 5. The officers of the Institute and members of the General Committee shall be chosen from the resident members, and be elected by a majority present, on the stated meeting of October in every year.

Art. 6. Seven members, exclusive of Officers, shall form a quorum to transact business, except altering the constitution and electing honorary members, in which cases, thirteen members, exclusive of officers, shall be required to form a quorum.

Art. 7. The election of new members shall take place on any stated meeting, and shall be by ballot; a majority of the members present shall elect.

Art. 8. Any gentleman distinguished for his knowledge of any of the objects of this Institute, may be proposed and elected an honorary member; provided he does not reside within the limits of the District of Columbia, but no obligations shall be required of him.

Art. 9. All resident members shall pay into the hands of the treasurer, five dollars, at the stated meeting in October of every year during his membership.

Section III.

DUTIES OF OFFICERS.

President.

Art. 1. It shall be the duty of the president to take the chair precisely at the hour assigned for each meeting, to preserve order, and, in all equal divisions, to give the casting vote; he shall likewise have a general superintendence over the concerns of the Institute.

Vice Presidents.

Art. 2. During the absence of the president, his duties shall devolve on the eldest vice president present.

Secretary.

Art. 3. The secretary shall take minutes of the proceedings at each meeting, note the members present, and carefully transcribe, in a book provided for that purpose, all the transactions of the Institute, and attest the same by his signature. He shall likewise give notice of the meetings of the Institute in two or more newspapers of the District of Columbia. .

Treasurer.

Art. 4. The treasurer shall collect all monies due to, and discharge all bills accepted by, the Institute, which the president or chairman of the general committee shall have signed. He shall keep a regular account current of his receipts and expenditures, in a book provided for that purpose, which shall be open for the inspection of every member at each stated meeting; and a fair copy of his receipts and expenditures shall be submitted, at the stated meeting in October of every year, or oftener if required, to the inspection of the general committee, or any special committee, appointed by the general committee for that purpose, which, when verified by the general or special committee, shall be deposited with the curators. The treasurer shall give a bond for the faithful discharge of his trust.

Curators.

Art. 5. The curators shall take charge of all original communications, and file them under their respective heads; also, specimens which are not to be cultivated in the Botanical Garden; also all drawings, books, &c. belonging to the Institute, and shall keep a book with a list of donations, with the names of the respective donors, and their places of residence.

Section IV.

Of Meetings.

Art. 1. There shall be a stated meeting on the first Monday of October and April of every year.

Art. 2. Special meetings may be convened by a resolve of the Institute, or by the president, with the concurrence of five members of the general committee, signified to him in writing.

Art. 3. The general committee shall meet on the first Monday of November, and afterwards on their own adjournments. Any member of the Institute may attend the meetings of this committee, but shall not participate in the duties thereof.

Section V.

Art. 1. All pecuniary donations and bequests shall be received by the president of the Institute, and be delivered over, by him to the treasurer, to be appropriated under the control of the general committee.

Art. 2. No alterations, additions or amendments shall be made to this constitution, unless they shall have been proposed to the Institute by at least three members of the general committee, and shall then lie over until the next stated meeting, and meet with the concurrence of two thirds of the members present, for their adoption.

Statute I. Chap. CXXV.—An Act to incorporate the Columbian Institute, for the promotion of Arts and Sciences. (Approved April 20, 1818.)

Be it enacted, &c., That Edward Cutbush, Andrew Hunter, Thomas Law, Joseph Anderson, Robert Brent, Overton Carr, Nathaniel Cutting, Elias B. Caldwell, John Law, Roger C. Weightman, William Thornton, Josiah Meigs, James H. Blake, Samuel H. Smith, and others, composing the association in the District of Columbia, denominated the Columbian Institute for the promotion of Arts and Sciences, and their successors, duly elected, in the manner hereinafter mentioned, be, and they are hereby, constituted and declared to be a body politic and corporate, by the name and title of the Columbian Institute for the promotion of Arts and Sciences.

Sec. 2. *And be it further enacted*, That all and singular the goods, chattels, and effects, heretofore given, granted, or devised, to the said Columbian Institute for the promotion of Arts and Sciences, or to any person or persons for the use thereof, or that may have been purchased for, or on account of, the same, be, and the said goods, chattels, and effects, are hereby, vested in and confirmed to the said corporation hereby created; and the said corporation are hereby authorized and empowered to take and receive any sum or sums of money, or any goods, chattels, or effects, of any kind or nature whatsoever, which shall or may hereafter be given, granted, or bequeathed, unto the said corporation, by any person or persons, bodies politic or corporate, capable of making such gift or bequest: *Provided always*, That such money, goods, chattels, or effects, be laid out or disposed of, for the use and benefit of the said corporation, according to the intention of the donors.

Sec. 3. *And be it further enacted*, That the said corporation, hereby created, shall have full power and authority to fill all vacancies which may happen in their number; to make, ordain, establish, and execute, such by-laws and ordinances as may be deemed useful to the institution, and the same to alter, amend, and abrogate, at pleasure; to make, have, and use, a common seal, and the same to break, alter, and renew, at will; to appoint such officers as may be required for the management of the concerns of said corporation, and to assign them their duties; and, generally, to provide for the transaction of all business appertaining to the said corporation: *Provided*, That no by-law, rule, or ordinance, of the said corporation, shall be made repugnant to the laws of the District of Columbia.

Sec. 4. *And be it further enacted*, That the said corporation may procure, by purchase or otherwise, a suitable building for the sittings of the said institution, and for the preservation and safe-keeping of a library and museum; and, also, a tract or parcel of land, for a botanic garden, not exceeding five acres: *Provided*, That the amount of real and personal property to be held by the said corporation shall not exceed one hundred thousand dollars.

Sec. 5. *And be it further enacted*, That there shall be an annual meeting of the members of the said corporation, at such time and place as the proper officers of the said corporation may appoint, of which due notice shall be given, in one or more of the newspapers published in the District of Columbia; at which time and place the members present shall elect or choose, by ballot, the officers of the institution, to serve for one year ensuing their election, and until others shall be elected and consent to serve in their places.

Sec. 6. *And be it further enacted*. That the said corporation shall not be engaged in any banking or commercial operations; and the continuance of this charter shall be limited to twenty years from and after the passage of this act, unless sooner revoked by Congress.

A CONSTITUTIONAL ORDINANCE FOR THE GOVERNMENT OF THE COLUMBIAN INSTITUTE FOR THE PROMOTION OF ARTS AND SCIENCES.

(Adopted October 11, 1820.)

Article 1. The Institute shall be styled "The Columbian Institute for the promotion of Arts and Sciences."

Article 2. The Institute shall consist of five classes, viz: of mathematical sciences, physical sciences, moral and political sciences, general literature, and the fine arts.

Article 3. The members composing each class shall specially charge themselves with the investigation of the objects embraced therein, and communicate to the Institute, from time to time, the result of their enquiries; but every member of the Institute shall have the right of making such communications as he may deem proper, on any object of art or science.

Article 4. The Institute may be composed of resident, corresponding, and honorary members.

Article 5. Resident members shall be persons residing in the District of Columbia. They shall pay to the Treasurer of the Institute, five dollars, each, upon their admission, and a like sum on the last Saturday in each year thereafter. Those who, without leave, omit, for one year, to attend a meeting of the Institute, and to make the payments required by this article, shall forfeit their membership.

Article 6. Corresponding members shall be persons residing out of the District of Columbia, and who may have manifested a desire for the promotion of science, or the arts. To this class of members shall, also, belong those resident members who may remove out of the District of Columbia; provided they shall acquaint the Institute with their wishes to that effect. Corresponding members may, if they judge proper, make the same payments as resident members; and in that case, they shall be entitled to vote on all questions that may be brought before the Institute at any meeting at which they may be present.

Article 7. Honorary members shall be persons distinguished for their knowledge in any of the arts or sciences, and residing out of the District of Columbia. No duties shall be required of them.

Article 8. The election of new members shall be by ballot, and the concurrence of two-thirds of the members present, shall be necessary to a choice; but the election shall not take place until one month after the meeting at which the candidate shall have been proposed for admission. Resident and corresponding members can be elected only upon their own request, in writing, or upon the proposition of a member, made at their instance.

Article 9. Resident members shall, as soon as may be after their admission, indicate the class to which they wish to belong. The like indication shall be made by those who are now members, on or before the first Saturday in January, 1821.

Article 10. Each member shall receive a diploma, or certificate of membership, under the seal of the Institute, signed by the President, and attested by the Secretary.

Article 11. The officers of the Institute shall consist of a President, Vice-President, Secretary, Treasurer, and five Counsellors, (one for each class) to

be chosen, by ballot, from among the resident members, immediately after the passing of this ordinance, and next, on the last Saturday in the year 1821, and thereafter, on the last Saturday in each year.

Article 12. The President shall preside at the meetings of the Institute; but shall, nevertheless, be entitled to vote on all questions. He shall attend to the welfare of the Institute, generally.

Article 13. The Vice-President shall, in the absence of the President, perform the duties of that officer.

Article 14. The Secretary shall keep a journal of the proceedings; and also, a record, in which each member shall, after admission, subscribe his name. He shall take charge of all communications; and shall give due notice of the meetings of the Institute.

Article 15. The Treasurer shall receive all moneys of the Institute, and shall disburse the same on the order of the President, countersigned by the Secretary. He shall keep an account of his receipts and expenditures, which he shall exhibit, whenever required by the Institute, and at the annual meetings, he shall lay before the Institute, a statement of its fiscal concerns.

Article 16. The Counsellors shall have a regard to the interests of their respective classes; and report to the Institute whatever they may deem beneficial to them.

Article 17. The officers of the Institute shall, together, be a Board of Administration, (of which the President and Secretary of the Institute shall be President and Secretary) which shall have a general superintendence of the affairs, of the Institute, and of the hall, library, cabinet, observatory, philosophical and other apparatus, and of the botanic garden, and of all other property and effects belonging to the Institute. This Board shall meet whenever the President, or any two members of it, shall deem proper; and a majority of the members shall be a quorum. It shall be subject to any instructions from the Institute.

Article 18. Any officer may be removed by the concurrence of two-thirds of the members who may be present when the resolution for his removal may be brought forward; but no such resolution shall be brought forward without one month's previous notice thereof. In case of the death, resignation, or removal of any officer, a new election shall be held to fill the vacancy.

Article 19. An annual meeting shall be held on the last Saturday in each year; a stated meeting on the first Saturday in each month; and special meetings whenever three members concur in a request to that effect.

Article 20. Five members shall be a quorum; but, in the absence of a quorum, those members who may be present shall have power to adjourn a meeting.

Article 21. This ordinance shall not be altered or repealed without one month's previous notice.

WASHINGTON BOTANICAL SOCIETY.

This society, of which the preliminary meeting was held on March 13, 1817, pursuant to a public notice, and which adopted a constitution on March 20, continued in existence until 1826, though its activities were mainly confined to the first four years. The original records of its proceedings, contained in a small manuscript volume now in the possession of the Botanical Society of Washington, with some other material of that period, have served as the basis for a paper by Mr. Frederick V. Coville on "Early botanical activity in the District of Columbia," published in the Records of the Columbia Historical Society, Washington, D. C., vol. 5, pp. 176–194, 1902. Mr. Coville has so fully described the work of the society that only some of the more salient features will be spoken of here.

The objects of the society, as defined in the constitution, were

"to collect, arrange, preserve and describe all the vegetable productions within the limits of the District of Columbia whether indigenous or exotic and to detail when practicable all their medicinal, esculent and other properties;" and "to publish quarterly, if deemed necessary, whenever the society shall have obtained a full knowledge of all the vegetable productions of the said District, a Flora, with colored plates; each plant to be classed and arranged according to the Linnean System and described, if known, under the direction of the president and vice president of the society."

Meetings were to be held twice monthly during the spring, summer and fall, and once monthly during the winter. The constitution further provided that,

"The society shall be divided into four committees, each committee to consist of one-fourth of the members, including officers, whose duty it shall be to collect and preserve the specimens of plants they may find within the portions of the District assigned them for examination, which specimens shall be preserved in a herbarium prepared for that purpose by the society and placed under the charge of the curators.

"Every committee shall be furnished with a herbarium to preserve the duplicate plants they may procure in the course of their researches, and when the class, order, genus and species of a plant cannot by them be ascertained, it shall be their duty to lay it before the society at their stated or special meeting, to be examined and arranged."

The subscribers to the constitution, thirteen in number, the officers for the first year being indicated, were as follows: Rev. Dr. James

Laurie, president; Samuel Eliot, jr., first vice president; George Watterston, secretary; John Boyle, treasurer; Doctors Alex. McWilliams, John Brereton and Henry Huntt, curators; William A. Bradley, William Elliot, J. W. Hand, James Kearney, J. M. Moore and John Underwood. Subsequent additions to the resident membership were Mr. Franzoni, Joseph Milligan, James Thompson, Mr. Steiner, Rudolph Schaer, Dr. Nicholas Worthington and Miss Ann Davis. At least half of these persons also belonged to the Columbian Institute. The Botanical Society, however, never included all of the above mentioned members at any one time, as many withdrew or were dropped for non-payment of dues or for non-attendance at meetings, and on March 6, 1822, the secretary announced the membership reduced to Dr. Brereton, Dr. McWilliams, Mr. Boyle, Mr. Underwood, Mr. Elliot and Maj. Kearney. Of honorary members there were three, elected in 1820, namely, Dr. Jacob Bigelow, of Boston; Dr. William Darlington, of West Chester, Pa.; and Dr. W. P. C. Barton, of Philadelphia.

The four committees between which the District was to be divided for purposes of collecting were appointed on April 7, 1817, and during the first four years the society displayed much activity, many specimens being presented, examined and discussed at the meetings, which numbered 28 in 1817, 26 in 1818, 21 in 1819 and 15 in 1820. By this time, however, interest had begun to decline, and we find only 5 meetings recorded for 1821, and 7 for 1822. In the four years which followed there was but a single meeting annually, and at the last of these, on March 27, 1826, while officers were elected and no act of dissolution was passed, the society adjourned *sine die* after adopting the following resolutions:

"That it be made the duty of the president of the society to collect all the books belonging to the same, to have them deposited in a case in the Washington Library, under the charge of the librarian, that each member may have access to the same agreeable to the rules of the society.

"That the president, Dr. McWilliams, be authorized to take charge of the herbarium till further order be taken."

That the society had been willing, under certain conditions, to surrender its independence in less than eight months from the time of its organization is evident from a resolution passed on October 31, 1817, but not carried into effect, namely,

"that the Washington Botanical Society consent to become members of the Columbian Institute provided they so alter the constitution as to admit said society into the Committee on Botany and Agriculture."

What finally became of the specimens has not been ascertained, but under date of January 14, 1826, over two months before they were

placed in his possession, Dr. McWilliams turned over to the Columbian Institute an herbarium which he said was of his own collecting.

Two important propositions advanced by the Botanical Society were the establishment of a botanical garden and the formation of a national herbarium, both of which were also among the objects of the Columbian Institute. The first, submitted by Mr. Watterson on September 12, 1817, but not acted upon at that time and never subsequently referred to, provided,

"That a committee be appointed to present a petition to Congress requesting the passage of a law authorizing a lottery for the purpose of establishing a botanical garden in the City of Washington under the superintendence of this Society."

The second, adopted on March 27, 1820, which may very well have been put in operation, though the period of activity was then near its close, was in the form of a resolution, as follows:

"That with a view to form a national herbarium it shall be the duty of each member to preserve two or more of such specimens as he may collect or procure, to be submitted to the society at their stated meetings, and a selection of the best shall be made and transferred to the general herbarium under the care of the curators whose business it shall be to arrange them at the close of every year, name them, and deposit the said collection in the herbarium of the United States."

Speaking of the final adjournment of the society, Mr. Coville says: "Although the society itself was dead, it left, either directly or indirectly, certain published records of its work on the flora of the District." He mentions three publications, namely, "Florula Columbiensis," a list of the technical and popular names of 296 species of flowering plants with the date of their observation in 1817 and 1818, printed for the society; a chapter on the "Botany of the District of Columbia," containing a list of 458 plants, by Dr. J. A. Brereton, printed in William Elliot's *Washington Guide*, 1822 and subsequent editions; and "Florae Columbianae Prodromos," compiled by Dr. Brereton, published in 1830, enumerating 860 species and, therefore, greatly extending the number recorded in the journal of the Botanical Society.

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